Identifying Domestic Space in Neolithic Eastern Mediterranean: Method and theory in spatial studies.

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Declaration

I declare that this thesis has been composed entirely by myself.

Demetra Papaconstantinou
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To my parents

and the memory of my grandparents

Abstract

The aim of the present thesis is to investigate the way in which space, in particular 'bounded' space, such as dwellings, was conceptualised, divided and used in the Neolithic Eastern Mediterranean, and from a methodological point of view, to examine the degree up to which current archaeological research and the information it provides, is sufficient to deal with these kind of issues.

In order to understand better the evolution of spatial studies in archaeology, one needs to turn to the history of the discipline itself. This calls for an examination of the ways in which the archaeological record has been perceived by different schools of thought in archaeology, as well as the questions that it has been called upon to answer in each particular period. Chapter 1 attempts to do precisely that. Additionally, it outlines the position that is taken up by the present thesis, and emphasises the importance of both a contextual and cross-cultural approach to the material.

Chapter 2 investigates in more detail developments in spatial studies, and discusses the difficulties of dealing with the fragmentary nature of the archaeological record, while at the same time stresses their potential for further research.

Chapter 3 outlines the nature of the analysis undertaken in the present thesis, and the methodological approach to the material under investigation. It reviews in brief the ways in which spatial issues have been approached in Neolithic East Mediterranean, sets the parameters of the present research and describes the methodological process that is to follow.

Chapters 4 and 5 deal with the archaeological material and examine the 'quality' of the contextual information available, along with the implications that this information has on the identification of domestic space. In chapter 4 the analysis focuses on the material from Cyprus, which, due to its nature and state of publication, provides a valuable insight on the advantages that a detailed analysis of contextual information has to offer. In Chapter 5, on the other hand, analysis focuses on three different areas (Greece, Anatolia and Levant) with more limited information, in an attempt to explore the potential of a cross-cultural approach to the material. Both chapters review Neolithic period research that has been conducted in each area, in order to distinguish between limits set by the nature of the archaeological record, and those which result from archaeological practices and preconceptions.

Finally, chapter 6 is a synthesis of what has been learned in the course of the present research about the identification of domestic space in the Neolithic Eastern Mediterranean, and the ways in which archaeological practice needs to alter if substantive progress is to be made in this field.

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PREFACE

" An archaeological find is only as good as the notes upon it"

(Taylor 1948: 154)

The organisation of domestic space and the location of activity areas has been the focus of an increasing number of studies in the past decades. Archaeological remains and their spatial interrelationships are often associated with specific behaviour patterns which are used for the reconstruction of the socio-political organisation of past societies.

However, despite the increasing interest in the subject, it seems that research has reached a methodological deadlock (chapter II). As Gamble (1991:15) pointed out archaeologists do not really know what they should be measuring in order to identify behaviour among the patterns in living areas.

The results from the two main approaches used so far: quantitative techniques / statistics and ethnoarchaeology, have been rather limited (Whallon 1984). Research does not seem to have come to an agreement on a particular quantitative technique that would facilitate the identification of patterned behaviour (Hietala 1984), and the majority of techniques employed so far, requires high levels of preservation and recording, which are not always available in archaeology.

Ethnoarchaeology, on the other hand, no matter how important a role can play in the identification and description of the factors which influence behaviour and patterning, can not be of much help if it does not start analysing its data into an archaeologically comprehensible way, showing how observations about behaviour can be 'translated' into archaeological distributions (Gamble 1991: 4-5). Most recently, models of simple explanatory nature (Flannery 1972) have given way to more organised attempts to identify certain variables that could indicate changes in behaviour (Kent 1984, 1990). However, although the contribution of these models to archaeological research must be acknowledged, their validity in archaeological terms still remains to be tested.

Although the initial idea about the present thesis was to examine spatial variability within and between structures in a certain area (Eastern Mediterranean: Greece, Anatolia, Levant, Cyprus) and period (Neolithic), following S. Kent's model (chapter II), it was soon realised that there was a number of other, equally significant theoretical issues, which played an important role in the understanding of the particular topic. These were matters related to the way spatial information is approached by archaeology and the degree up to which the archaeological record is sufficient to provide information about activity areas and changes in the use of domestic space.

An attempt was therefore made to set information about structures and their furnishings in a wider methodological and theoretical context. As a result, the present thesis apart from 'cultural' questions also investigates questions related to archaeological practices, namely questions about the way we excavate, record and write in archaeology.

The synthetic nature of a study that seeks to understand the activity patterns within and between structures is quite evident. It is not only a special category of artefacts that is of interest in such a study, but all kinds of artefacts that were found in a structure, their spatial interrelationship, the permanent features, the variability from structure to structure etc. One could say that is the whole archaeological record, or at least a large part of it. Consequently, in an attempt to understand better the nature of the information that I sought to examine, it seemed necessary first of all to understand the way in which the very nature of the archaeological record was perceived by the different schools of thought in archaeology. This has been the subject of the first chapter, which indicates that despite the numerous paradigms

and phases (the objectification of the archaeological record in the beginning of the century, its representation as a fossil by processualism or as a text by post-processualism) archaeologists are still uncertain about the way in which they should approach the archaeological record.

Taking into consideration this background, the second chapter follows a similar route and examines the development of spatial studies in parallel to the ideas about the archaeological record: initially with the application of statistics (60s-70s) and later with the introduction of ethnoarchaeology. Despite the general nature of this review, it is important to keep in mind that the thesis focuses mainly on structures, attempting a microscale analysis. The reference to the general literature was considered necessary for two reasons: a) because spatial studies constitute a very good example of a field that has been dictated by available methodologies rather than the questions it seeks to understand (Whitelaw 1989), and in that sense the review makes clear the reason why microscale analysis had a rather marginal place among spatial studies, and b) because it is important to realise that all three levels of settlement analysis (which focuses on either buildings, communities or regions) are interrelated and regardless of where one chooses to put the emphasis on, they should not being studied in isolation.

Within this theoretical and methodological background, the aim that the present thesis set for itself, is to investigate the available archaeological material from Neolithic Eastern Mediterranean and examine the evidence against which one is called upon to test and apply suggested anthropological models, or make statements about the way domestic space was used in the area. Chapter III outlines the parameters of this attempt while chapters IV and V provide the analysis of the material.

In order to cope with the fragmentary information, I attempted two different methodological approaches: a general one, for information that is available only in preliminary reports (see mainly chapter V) and a second, more detailed, for archaeological reports which provide specific contextual information (chapter IV).

Despite the difficulties in the nature of the material, if processual archaeology has taught researchers something, it is how to formulate and modify questions and hypotheses in order to approach a subject, and how to make explicit any assumptions or discrepancies in their methods. These are two principles that have been kept in mind and have guided the creation of the following analysis.

The process of writing a thesis brings in mind Foucault's (1980) words:

> 'I only write because I don't know exactly what to think of this thing that I would so much like to think through. Thus the book transforms me and transforms what I think. I write in order to change myself, and not to think the same thing as before'.

As the author, I have definitely had this experience, viewing the archaeological record in a very different way after the process of this research.

CHAPTER I

THE ARCHAEOLOGICAL RECORD AND ITS NATURE

"The history of archaeology is in the first instance a history of ideas, of theory, of ways of looking at the past. Next it is a history of developing research methods, employing those ideas and investigating those questions. And only thirdly is it a history of actual discoveries." (Renfrew & Bahn 1991:17)

"Yet, if subjective factors intervene at every level in the interpretation of the past, so too does archaeological evidence, which, at least within the bounds of a commitment to scientific methodology, partially constrains and limits what it is possible to believe about the past" (Trigger 1989:407)

1. 1 Introduction

Archaeology as a discipline has a relatively short history of about a century and a half. It developed mainly as the result of the encounter of European states with the diversity of other cultures and the attempt to clarify and establish their own identities (Sherratt 1993:119-120). The strong links with anthropology and other disciplines such as biology and geology, which characterised archaeology's early history, were decisive for its future development. However, the nature of archaeological evidence, which consists of the material remains of past societies, distinguishes it from all the other disciplines which study human culture.

The way in which archaeology defines itself and sets its objectives in relation to other disciplines has a direct influence inevitably on the way in which it deals with the available evidence, and formulates its subjects of enquiry. Particularly affected by this process, are studies that focus on early periods where no aid from written sources is available, and the nature of the material is very fragmented.

Synthetic subjects as the one tackled in the present thesis: 'processes in the identification and use of domestic space in eastern Mediterranean', make it therefore necessary in order to understand specific problems, to review initially the way in which archaeological evidence has been approached by different schools of thought and the kind of questions it has been asked to answer. The necessity for such an attempt becomes also evident in the literature, where both at the specific

level of the study of activity areas within archaeological sites (Gamble and Boismier 1991), and at the broader theoretical level of the aims of archaeology as a discipline (Yoffee & Sherratt 1993), there seems to be a methodological deadlock.

Consequently, the present chapter will provide a historical review of the way in which archaeological record has been perceived and used in archaeology in order to define and clarify its nature. As a study about the use of domestic space is in essence a study about representations in the archaeological record as a whole, it seems appropriate, before any attempt to outline the analytical approach proposed in the present thesis, to provide first some insights into the wider theoretical framework in which the concept of the archaeological record evolved.

1. 2 Historical background

Any attempt to investigate the way in which archaeology treated a specific issue during its history could run the risk of being oversimplistic and superficial. However, the examination of a topic from a historical perspective is very important, as it sets the problems in their right context and provides more rounded insights into the specific subjects. The attempt, therefore, can be considered worthwhile.

In the following section, I shall discuss the main theoretical and methodological trends in archaeology and examine the way these have influenced our approach to the archaeological record and our ideas about what this represents[i]. The history of archaeology will be conventionally divided into three phases: pre-processual (classificatory or historical archaeology), processual (New Archaeology), and post - processual archaeology [ii]. Successful or not in its claims, New Archaeology has marked the history of the discipline and is frequently used as a point of reference in historical reviews (Trigger 1989, Hodder 1986, Renfrew and Bahn 1991; but see Knapp 1996: 147). Therefore, the distinction between these three phases is quite broadly accepted, and the present investigation of the way in which ideas about the nature of the archaeological record have changed, could provide one more reason for the justification or elimination of this tripartite division. Finally, one should keep in mind that although these phases are presented here in a historical sequence according to the time they appeared in Anglo-American archaeology, in many cases, nowadays, they can be found acting in parallel (see chapter IV and V).

Set in this frame, the following review focuses on three main issues:

i) what does the archaeological record represent in each of the three periods?

ii) in which theoretical environment did the 'ideas' about the archaeological record develop?

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[i] The review will mainly focus on developments in the Anglo-American archaeology, overlooking in a way significant and parallel developments in other European and non-European countries (France, Germany, Scandinavia but also Russia, Czechoslovakia etc.). The attempt to review several archaeological traditions would be beyond the scope of this research, and impossible to include in the limited space of a doctoral thesis. However, when necessary, an effort has been made to provide the relevant references in the text. For a general reference on the history of different archaeological traditions see : Trigger 1989, Hodder 1991a, Ucko 1995.

[ii] elsewhere the different approaches are identified as : normative, positivist and radical (Earle & Preucel 1987: 502)

iii) what kind of methodological procedures were employed each time for the examination of the archaeological record?

1. 2. 1 Pre-processual period

i) *what does the archaeological record represent?:* Pre-processual period is a period that refers roughly to the first half of the 20th century. According to David Clarke, it is an era of 'self-consciousness' for archaeology, a time during which the discipline makes "contentious efforts to cope with the growing quantity of archaeological observations by explicit but debated procedures and the querulous definition of concepts and classifications." (Clarke 1973:6). Indeed, during this period, archaeologists seem to be far more eager to classify and put their data in an order, than to deal with more theoretical issues, as for example the nature of the archaeological record and what it actually represents. Although occasionally one comes across the use of the term, in the majority of cases reference is given to 'material culture', 'material remains' or archaeological 'data', rather than the archaeological record *per se*.

In its simplest form 'archaeological record' is described as the mere agglomeration of artefacts and features (Childe 1956:12) and researchers focus mainly on its fragmentary nature and subjective character. Quite often it is described as the ordering of 'observational data'(Piggott 1965:4, Childe 1956:1), and is considered an artificial creation of archaeologists. Sometimes it is even equated with site reports:

> "is it not the archaeologist's most urgent task the actual research into the ground for new evidence, carried out with all necessary precautions and the most modern techniques, so that no data escape his scrutiny? It is an equally important task to re-evaluate, in highly critical mood, the results of the most notable excavations made in the past. This is the only short route towards providing a larger number of archaeological records of dependable value." (de Laet 1957:81)

It is therefore rather obvious that during this period there is no particular concern for the nature of the archaeological record and the components of its physical substance. The emphasis is mainly put on the artefacts, while 'archaeological record', when used as a distinctive term, is presented more as a product of problematic methodological procedures, rather than as the subject of archaeological enquiry itself.

In order to understand this vacuum in terms of terminology, it is important to remember that during this period, culture is conceived as a body of shared ideas, values and beliefs (the 'norms' of a human group), and material remains represent the 'products' of culture rather than culture itself (Taylor 1948, Osgood 1951, Flannery 1967). Archaeologists therefore deal 'with objectifications of culture' (Taylor 1948:113), 'static molds which bear only the imprint of life' (Willey 1953:1), and consequently they are incapable of making inferences about behavioural patterns, since archaeological data is essentially the 'result' of behaviour rather than 'behaviour' itself (Taylor 1948:113). The following section will look into the origins of these ideas in some details.

ii) *the theoretical environment in which the 'ideas' about the archaeological record developed:* In order to understand better the theoretical environment within which the above ideas about archaeological evidence developed, one should probably turn to the history of archaeology from the time of its origin as a separate discipline, as well as the influence and the links that it had with other disciplines.

When archaeology, after a long period of antiquarianism, was initially established as a discipline in the middle of the 19th century, it had very strong links with several other disciplines: geology, anthropology and biology (Daniel 1975, Trigger 1989, Renfrew & Bahn 1991). One could actually argue, that during this period, archaeological evidence was mainly used in order to reconfirm and support theories that were introduced by these disciplines. Whichever the case, the relationship of archaeology with other disciplines proved very significant, because it provided the necessary 'tools' for dealing with a number of theoretical and methodological issues.

Two of the most fundamental concepts borrowed at that period were: a) the concept of "uniformitarianism" (Hutton 1785, Lyell 1833), and, b) the concept of evolution (Darwin 1859). The concept of 'uniformitarianism', according to which the geological ancient conditions were similar to the modern ones, along with the distinction of rock formations into superimposed layers (or strata), constituted the basis for the study of stratigraphic associations in archaeology. The concept of evolution, offered an explanation for the emergence of the human species that determined archaeological interpretations for quite a while, and at the same time, based on structural similarities, introduced into archaeology the concept of typology which was to become the most basic methodological tool for the discipline (Renfrew and Bahn 1991: 23).

The idea of evolution had also a great impact in the broader discipline of anthropology, which was gradually led into the attempt to identify different stages in the way human societies evolved and into broad generalisations about cultural evolution (Tylor 1871, Morgan 1877).

Archaeological research during the pre-processual period, in the beginning of the century, was still to be characterised by these 'old' affinities with other disciplines. One has only to mention some of the most influential works of the period and their relation to neighbouring disciplines:

a) The work of Franz Boas (Boas 1911, 1928, 1927), which had a great impact on methodological procedures in archaeology (data collection, classification, stratigraphy), and led to 'historical particularism' and the understanding of culture as a 'pattern of norms' (Earle and Preucel 1987:503), was mainly the result of anthropological studies on modern communities.

b) The classificatory system developed by Oscar Montelious (Montelius 1903), which despite the fact that it has been proved very useful for archaeology, was nevertheless the outcome of the interest of a natural scientist in the problem of chronological sequences.

c) Finally at the level of interpretation, the whole debate of functionalism, that characterises this period and was also used later by processualists (in the form of 'systems theory'), was initiated by a

French sociologist, E. Durkheim (Durkheim 1938), who had very little interest in the study of past societies. The main criticism of the model, the fact that its analysis overlooks the structure in a socio-political system, could be explained and understood if one takes into consideration that the model was developed to explain modern communities where the socio-political structure was already evident.

Set in this framework, the lack of interest in the concept of the archaeological record is not surprising. It seems to be rather the result of a discipline that was unable yet to define its field and matter of inquiry.

Anthropology, focusing on living communities, seems to have had always strong links with archaeology due to the subject matter of its analysis: archaeological evidence provided the historical depth that anthropology was lacking, while anthropology, made obvious the variety and richness of information that archaeology was missing. However, apart from the methodological issues, the links between the two disciplines are also evident in the objectives that archaeology set for itself during this period. The three main tasks of archaeological enquiry: 'historiography', (the compilation of culture history), the reconstruction of life ways, and the analysis of cultural processes (Binford 1968, Willey and Phillips 1958), have been all developed in parallel with similar approaches in anthropology (Flannery 1967). However, historical reviews on the subject usually characterise archaeology as been "consistently one stage behind anthropology in its concrete accomplishments" (Leone 1972:16, also Flannery 1967:119) and 'accuse' it of providing merely descriptive analysis.

While the debate about archaeology's relationship with other disciplines continuous, and constitutes on of the most controversial and vivid areas of enquiry for current research, it is quite obvious that archaeology in its earlier stages borrowed both its methodological and interpretative models from neighbouring fields, loosing sometimes control on its own agenda. As illustrated from the preceding review, one could argue that the descriptive nature of archaeology in this period and its focus on classification and chronology, were rather the result of the interest that other disciplines had in the archaeological record, than a conscious choice of archaeological research itself. Archaeologists, in their effort to cope with the increasing quantity of data, gradually became aware of the potential and the problems of their record, but it was only after World War II, with the technological 'revolution' of the 1950s (see below), that they finally moved to a level of 'critical self-consciousness', in which attempts were made 'to control the direction and destiny' of the discipline by a 'closer understanding of its internal structure and the potential of the external environment' (Clarke 1973:7).

iii) *methodological procedures employed for the examination of the archaeological record:* The methods employed for the study of the archaeological material are equally significant and indicative of the general atmosphere in the particular period. Takkgren (1937:154-155) describes the atmosphere of the period in the most characteristic way:

> "...the whole subject [of archaeology] consists merely of a comparison of forms and systematisation...Forms and types...have been regarded as much more real and alive than the society which created them...".

Few decades later, research was exactly at the same point, with Gordon Willey in America admitting that he has "nothing more to offer than a descriptive synthesis" (Willey 1962:1), and Jean-Claude Gardin in France seeking a standardised way for the 'economical presentation and dissemination of artefact descriptions' because researchers seemed to spend more time 'in assembling data than in analysing them' (Gardin 1958: 335)

The analytical model followed in the pre-processual period is that of induction. Archaeologists gather their observational data "as objectively as possible", classify and categorise their material and at the end form an interpretative model, a synthesis, that would give meaning to the data (Taylor 1948: 115). This method will be later highly criticised as being merely descriptive, and based on "strict empiricism", 'intuitive inferences', 'generalisations' and 'psychological objectivity' (Binford and Sabloff 1982:137, Binford 1968a:11).

After World War II (50s) and the introduction of more sophisticated techniques of analysis, archaeological methods improved and changed dramatically (Clarke 1973). The invention of radiocarbon (^{14}C) dating, as well as a whole range of new techniques concerning site location, data recovery and processing, artefact studies and environmental studies, were to indicate the potential of the information available in the archaeological record and at the same time to expose the inadequacies of the explanatory models in use. However, despite the general dissatisfaction with the methods and the classifications that were employed (Erasmus 1950, Ford 1954), research did not manage to overcome the 'old', 'simplistic', 'comparative' approach, and it was only in the 60s-70s, that significant changes in archaeological theory and practice came about.

Before we proceed to the next period, particular reference should be given to the work of two American anthropologists: Julian Steward and Walter Taylor because of the impact they had on later developments and their importance for the methodological approach adopted by the present thesis.

Julian Steward was interested in explaining cultural change and the role that ecological factors played in the formation of sociocultural systems. An ethnologist himself, he also carried out archaeological research and he argued that both disciplines should focus on an ecological analysis of human behaviour (Trigger 1989: 279). Following the belief that adaptation to the environment could cause cultural change, he sought, by means of comparative studies, to determine the different ways in which human populations adapted to their environment.

His research on the Ancient Caves of the Great Salt Lake Region (Steward 1937) was an attempt towards this direction. Based on data from both archaeological and ethnographic settlement

patterns he examined the interaction between culture and environment by studying the regularities that existed at a cross-cultural level, in form, function and cultural processes.

Julian Steward, along with Graham Clark in Britain (in the 50s) who shared the same interests, contributed to the recognition of the environment as a factor of great importance for cultural change. Although sometimes over-deterministic in its nature, their work was seminal for the development of new areas of interest in archaeology: a) it turned the focus on cross-cultural regularities and the study of both archaeological and ethnographic evidence, taking archaeology away from the 'cultural particularism' that had been the typical approach thus far (influenced by Boas; see above), b) it introduced environment as an important factor in the analysis of cultural change, and c) it initiated studies on whole geographical regions and on the interaction between culture and environment, opening new fields of enquiry for settlement archaeology (see chapter II).

Walter Taylor in his research followed a different route. In the frame of historical particularism, but rather in opposition to traditional trends, he developed a quite radical approach towards the aims and methods of archaeology, granting at the same time a very important role to the nature of the archaeological record (Taylor 1948).

Taylor's interest in the archaeological record originates from his idea about archaeology and its relationship with other relative disciplines that study human culture. Taking part in an increasing debate at the time, on whether archaeology should follow the developments in anthropology and focus on cross-cultural comparative studies or keep its historical orientation, he claimed that archaeology occupies a very distinct area of enquiry compared to other disciplines, and therefore should have its own methods and objectives:

> "...archaeology is neither history nor anthropology. As an autonomous discipline, it consists of a method and a set of specialised techniques for the gathering or "production" of cultural information"[Taylor 1948:44]
> "Archaeology per se is no more than a method and a set of specialised techniques for the gathering of cultural information. The archaeologist, as archaeologist is really nothing but a technician" [Taylor 1948:43]

In brief it should be pointed out that this debate determined future approaches and is still very vivid in theoretical archaeology. Taylor's arguments found supporters (Courbin 1988, Klejn 1993:341-342), but the majority of researchers usually choose to follow one of the two disciplines: anthropology or history. The most characteristic example of this trend, is the formation of the two subsequent schools of thought in archaeology, which demonstrates, to a remarkable degree, this polarisation, between processualism / cross-cultural studies / anthropology (Binford 1968) and post-processualism / contextual studies / history (Hodder 1986). As will be shown later, one's theoretical position in this debate, is also indicative of her/his methodological approach.

Taylor's approach to the role of archaeology inevitably led him towards a closer consideration of the nature of the archaeological record. So far research had focused on the study of

material remains of each culture, paying little attention to their interrelationship. Taylor stressed the importance of the 'affinities' (quantitative, qualitative, spatial etc.) that exist among the material remains, between them and between their natural environment (Taylor 1948:114). From this perspective, comparative studies attempted thus far, were considered quite unreliable, as they mainly focused on 'data which have relationships *outside* the cultural unit and attempt to place the newly discovered material in taxonomic or other association with extra-local phenomena' (Taylor 1948: 7). Instead it was suggested that a new, 'conjunctive approach' should be considered, having as a prime interest the study of interrelationships within a particular cultural entity. As a result the interest of research was pointed towards a more detailed analysis of the spatial interrelationships of archaeological data, revealing new areas of investigation for settlement archaeology and for archaeology in general.

Finally, Taylor emphasised the need for a more careful examination of the archaeological data, prompting archaeologists to differentiate between observed facts and derived inferences, to make 'explicitly labelled' interpretations and to look for evidence by which their hypotheses could be tested:

> "...it behooves the archaeologist not to maintain the untenable position of 'sticking to the facts', meaning the renunciation of inference, hypothesis and testing...If his readers find fault with his conclusions, they have but to examine the observational data and make their own inferences or set about producing, from the ground or elsewhere, more empirical evidence upon which to base alternative interpretations." (Taylor 1948:115)

It is quite surprising how close are these ideas *both* to processualism and post-processualism. However, one has to stress that Taylor disagreed in principle with many of the 'later to come' processual doctrines, as for example, problem oriented studies. In his opinion, questions on specific problems could justify certain types of analysis or research, but 'should not inhibit the excavations themselves' (Taylor 1948:155).

Taylor's contribution to subsequent methodological procedures was very important because he was the first scholar to emphasise the need to examine the archaeological record as a unity. His interest in carefully planned methodological procedures, and detailed contextual analyses was to have a great impact on archaeology, both on theoretical and methodological grounds.

In summary, one might argue that until the 1960s archaeological research was trapped within its 'traditional links' with neighbouring disciplines, and was unable to develop a distinctive idea about its objectives and the nature of its record. It is without doubt however, that despite its shortcomings, this period also set the basis and provided the 'tools' for all later developments.

1. 2. 2 Processual period (New archaeology)

i) *what does the archaeological record represent?* : The great shift in perspectives that characterises this era was epitomised by Lewis Binford, who was the founder of the new approach (Binford

1968a:17): "The changes consist of theories and methods developed in the context of a new epistemological perspective on such basic issues as the appropriate scientific procedures to be followed in investigating the past".

One should keep in mind, that the whole concept of 'the archaeological record' was probably a 'product' of this period, as it seems to have been introduced along with the concept of models (symbolic generalisations), expressing 'the shared commitment of archaeologists to a model of archaeological evidence, namely, the model of a record' (Patrik 1985: 31-32). In the new environment of positivism, which emphasised that the problems faced so far were just the result of false ideas and methods, processual archaeologists showed a special interest in the concept of the archaeological record. This is the period in which the reliability of the record to provide objective information was extensively discussed, the main problems regarding its nature were directly addressed and the importance of the exploration of its potential and limits was fully recognised.

Initially the approach to the matter was rather over-optimistic. The archaeological record was conceived as a fossil which bore no practical limitations for our knowledge of the past:

> "The loss, breakage and abandonment of implements and facilities at different locations, where groups of variable structure performed different tasks, leaves 'a fossil' record of the actual operation of an extinct society" (Binford 1964:425)

and few years later:

> "The practical limitations of our knowledge of the past *are not inherent* in the nature of the archaeological record; the limitations lie in our methodological naïveté, in our lack of development for principles determining the relevance of archaeological remains to propositions regarding processes and events of the past" (Binford 1968a:23) (emphasis added).

The same optimism also characterised statements that refer to the potential of the archaeological record to provide information about behavioural patterns. During this period, archaeological remains and their spatial interrelationships are considered "empirically observable records of patterned behaviour" (Watson *et al.* 1971:22; see also Schiffer 1975) and there is a conviction that "'non-material' aspects of culture are accessible in direct measure with the testability of propositions being advanced about them" (Binford 1968a:22).

Binford often criticised discussions about the limitations of the reliability of the record, as being 'inappropriate' and 'based on speculation' (Binford 1968a:22). He claimed that, until that time, there had been no attempts to assess the limitations of the archaeological record, while, at the same time, he stressed that such a task would have been premature and pointless, because archaeologists were still unaware of all the systemic relationships which characterise past cultural systems, and therefore they would not know what to look for.

It is true that processual archaeology paid greater attention towards the potential and limits of the archaeological record and addressed many of the problems that were related to its nature. This

involvement with the particular subject was to be proved very fruitful, and constitutes one of the main contributions of the processual approach to archaeological research.

One of the most significant debates on the subject was developed between Binford and Schiffer. In the following paragraphs I will summarise some of its main points.

Michael Schiffer (1972, 1975, 1976,1983,1987) showed a great interest in the problems related to the nature of the archaeological record, and his research is considered a seminal piece of work on the particular subject. Schiffer (1976:11-12) criticised Binford's idea of the archaeological record as being a 'fossilised cultural system'. He argued that such a belief would imply that one can interpret patterns in artefact distributions, 'directly in terms of past behaviour and social organisation', but such an implication would be false, because it ignores a very important attribute of the archaeological record which is its two-fold nature. According to Schiffer (1972, 1975, 1987) in the archaeological record there are two kinds of context represented: *systemic context* which refers to the dynamics in which material remains 'participated' in the past, and *archaeological context* which reflects the static form in which material remains are found.

> '...the archaeological record at a site is a static, three-dimentional structure of materials existing in the present. The remains in the site have undergone successive transformations from the time they once participated in a behavioural system to the time they are observed by the archaeologist. These transformations are effected by cultural (C-transforms) and non-cultural / natural (N-transforms) formation processes of the archaeological record' (Schiffer 1975:838).

As a result, the pattern of past behavioural systems that could come out of the distribution of archaeological remains is rather a distorted one.

In conclusion, Schiffer claimed that only "If the human participants and all other energy sources completely halt their actions...what remains (assuming no modifications by other processes) is the closest conceivable approximation of a 'fossil' of a cultural system" (Schiffer 1976:12-13), and consequently, only the ideal Pompeii model would be sufficient for reliable reconstructions, as the majority of archaeological sites are of limited potential in research (Schiffer & House 1977:250).

Urged by the general positivist environment of processual archaeology, Schiffer sought to establish archaeology as a Behavioural science and worked towards the identification of "experimental laws which would explain and predict empirical phenomena" (Schiffer 1975:838). His contribution to the field was very important because he draw attention to the nature of the archaeological record and what it represents. Most recently, his research focused on the examination of natural formation processes and the ways that these could be identified in the field, pointing out new fields of investigation (Schiffer 1987).

The impact of Schiffer's work resulted to the refinement of some of the initial statements by new archaeologists. Binford (1983c:232) commenting on formation processes explained that he never considered 'the degree of preservation of the archaeological record limiting in a practical sense', since he also recognised, that 'facts do not speak for themselves' and therefore all the arguments that refer to the past, and are based on the archaeological record, constitute inferences.

The only way for the researcher to test these inferences is to understand better the linkages between the dynamics of the cultural-systemic context and the statics of the archaeological context. Binford viewed the relationship between the two contexts as a causal one:

> "The archaeological record is a *normal consequence* of the operation of living systems, all of which are dynamic, 'flow through' systems, in which energy is captured and its potential reduced. ... The archaeological record must therefore be viewed as matter transposed and organised during the process of energy use and entropy production. It is the functional linkages between the organisation of a system and its energy-capturing tactics, together with its patterned residues (entropy), that yield information about the organisation of past systems" [Binford 1983c:234] [emphasis added]

As a result he concluded that the problem with the archaeological record is not related to its nature but rather to what it represents: 'archaeological record is a faithful remnant of the causal conditions operative in the past (Binford 1983c:235), but it represents 'the static remains of past *dynamic* behaviour'(Sabloff *et al.* 1987:204).

In relation to Schiffer's work, Binford argued that considering cultural formation processes distorting implied that there was 'some a priori set of expectations' (Binford 1983c:235) about the condition in which the record should be found. Moreover, the argument that both kinds of process follow regular patterns seemed oversimplistic. According to Binford, cultural formation processes should not be considered distorting, because they constituted part of the operation of a cultural system (Binford 1983c:234, 1982b). Similarly, he claimed that the three modes of deposition (primary refuse, secondary refuse and de facto refuse), which Schiffer proposed as presenting regular patterns, were quite simplistic and insufficient for a methodological model, because they did not take into account alternative processes (e.g. successive use of an area etc.).

In a most recent review of the above debate, Michael Smith (1992) relates the issue with a discussion about temporal rhythms and different time scales in archaeological data. He points out that Schiffer and Binford seem to perceive the archaeological record from different time perspectives, different orders of time and reality (Smith 1992:26-29): 'As Binford stresses, the archaeological record reveals more about the *places* where past activities were repeatedly carried out than about the individual episodes and activities themselves'. Consequently, although Schiffer seems to support in some cases the possibility of monitoring short intervals of time, Binford claims that the deposits recovered by archaeologists 'pertain to blocks of time *beyond* the life span of past individual actors'.

As Binford has put it (Binford 1983c:235-237), Schiffer sees the record as a slice of 'history', a synchronic cross-section of a cultural system (aiming to a historical reconstruction), while for him the archaeological record represents the dynamic changes of a cultural system (aiming to a processual reconstruction). Similarly, one could add, that while the first scholar (Schiffer)

oversimplifies cultural processes, the second (Binford) overlooks the degree of interference caused by natural processes.

ii) *the theoretical environment in which the 'ideas' about the archaeological record developed*: In order to gain a better understanding of the above mentioned ideas, some reference should be given to the main principles of the processual approach and the new objectives that it set for archaeology.

Bintliff (1986:11-12) summarised the tasks of the new approach in the following points:

1) The attempt to move the discipline away from its traditional, 'literary mode', into a more scientific approach where analysis focuses on quantification and statistical testing.

2) The rejection of particularist concerns, in favour of more generalising explanations in which society is conceived as a systemic entity.

3) The desire to form law-like propositions about human culture in the past, that would give archaeology a role in the broader environment of Social Sciences.

4) The belief that disciplinary boundaries should be demolished, and archaeology should adopt new 'models' and techniques developed in other disciplines.

These seem to be the new 'tools' that processual archaeology suggested in response to the dissatisfaction of the results of the previous period and the lack of theory in the discipline.

In an environment of absolute positivism about archaeology's potential to contribute to social sciences, the 'old' ideas about culture change and the nature of the archaeological record were approached from a different perspective. In their attempt to create a new theoretical framework for their objectives, processual archaeologists (Flannery 1967, Binford 1968, Clarke 1968) turned to other disciplines and adopted the theory of General Systems (Trigger 1989:303). This approach was first employed in the 1940s by a biologist, Ludwig van Bertalanffy, who considered the behaviour of entities (like for example: living organisms, sociocultural systems, thermostats etc.) as systems made up of interacting parts, and sought to delineate the underlying rules that govern them. Following this approach, new archaeologists were able to move from the traditional descriptive analysis of static structures, to the study of cultural processes, and what they thought to be the key for the explanation of cultural change. Both culture and the archaeological record were now viewed from a different perspective:

> "...culture is a system of interrelated components. The archaeological record must be viewed as the by-product of the operation of such a system, and any single facet of that record can be referred back to multiple variables or components of that system" (Binford 1972:97)

iii) *methodological procedures employed for the examination of the archaeological record*: The above mentioned approach to the record determined the methodological procedures that were employed for its examination, and at the same time gave reason to a new interdisciplinary era.

> " The correlations used to infer human behaviour from archaeological data had to be based on the demonstration of a *constant articulation of*

> *specific variables in a system*. Only if a particular behavioural trait could be shown always to correlate with a specific item of material culture, wherever both could be observed [ethnography], could such behaviour be inferred from the occurrence of that item in the archaeological record." (Trigger 1989:300-301) [emphasis added].

As a result archaeologists sought to formulate well established correlations and for this purpose they turned to the philosophy of sciences and a covering-law model of explanation that was first introduced by Carl Hempel (1962, 1965). According to him, scientific explanations could be achieved through the Deductive-Nomothetic approach in which the pattern that one might seek to explain (explanantum) is a result of: a) 'statements (particular circumstances) which make assertions about particular facts and b) general laws' (Hempel 1966:53).

Based on this theoretical framework, Binford formulated a new methodological procedure that was to characterise the whole approach of processual archaeology (Binford 1968a:19-20, 1972:117): i) archaeologists begin with observations on the archaeological record; ii) they formulate hypotheses that could help them link the archaeological remains (e.g. a specific item of material culture or variable) with conditions in the past that could produce them (e.g. a particular behaviour trait); iii) they test the validity of their hypotheses by determining additional observations and collecting any available independent data; iv) finally and if their hypotheses are verified, they can raise their results into 'the status of laws, regarding the role of archaeological remains in the functioning of extinct cultural systems'.

The existence of regularities and laws would equate explanation with prediction, and in this way it would provide archaeology with the scientific status that seemed to be the ultimate task for processualists. However, archaeologists soon realised that, because of the complexity of human behaviour, the establishment of cultural laws was not attainable. This was a problem that became broadly recognised in the literature (Flannery 1976, Hodder 1986, Courbin 1988, Barrett 1987, Renfrew & Bahn 1991) and it was also evident from the shift towards less deterministic statements by many of the new archaeologists (see for example: Watson *et al.* 1971, Schiffer 1976). As already mentioned, Schiffer from the earliest stages of his work, distinguished his position and emphasised the importance of 'experimental' laws rather than 'general' ones. In the subsequent years research moved towards a less rigorous approach. Influenced by the work of another philosopher of science, Karl Popper, (Popper 1963), the emphasis was now put on the formulation of hypotheses (Hypothetico-Deductive approach) rather than laws, and researchers mainly concentrated on projects that sought to resolve specific problems.

The methodological procedures described so far, present the way in which cultural inferences about the past should be made, according to processual archaeology. Hypotheses should be formulated based on archaeological data, and they should be tested against independent evidence. However, this was more an approach that referred to the interpretation of the information available in the archaeological record, rather than the record itself.

From the very early stages of his research Binford seemed to have identified the particular problem and pointed out the need for a more detailed examination on the subject:

> "If one accepts observations made on the archaeological record as contemporary facts along with the idea that such facts are static, then clearly basic problems for the archaeologist include (a) how we get from contemporary facts to statements about the past, and (b) how we convert the observationally static facts of the archaeological record to statements of dynamics [Binford 1977:6]

Based on this reasoning, he pointed to the need for the development of ideas and theories regarding the formation processes of the archaeological record (what later came to be called Middle-Range theory), and he claimed that it was only through an accurate understanding of such processes, that one could 'reliably give meaning to the facts that appear, from the past, in the contemporary era' (Binford 1977:7).

The influence of these ideas was to prove quite significant for subsequent research and provided the ground for the development of new subfields related to archaeology, such as ethnoarchaeology and experimental archaeology. Many scholars (Schiffer 1976, Baker 1978) turned to the study of natural formation processes, basing their arguments mainly on physical and biological principles. Schiffer, as already mentioned, worked on the difference between 'cultural and natural transforms' in the record, while Baker sought to examine how the size of an artefact could affect the probability of being exposed and therefore recognised in the field. Binford himself chose another direction. His interest was mainly focused on the formation of cultural processes, and for this purpose he sought help in the ethnographic record, pointing out to the importance of ethnoarchaeological studies. According to his opinion, the archaeological record per se was of little utility for 'a theory of cultural statics', because it was only in a 'living systems context' that one could monitor the relationship between dynamics and statics (Binford 1983a:165).

Yet, despite the numerous studies on the subject, the results have not been very encouraging. In 1982 Binford argued that processual archaeologists seemed not to have been fully aware of the problems in the relationship between the dynamic mode of the past and the static nature of the archaeological record. As an indicator, he pointed to the fact that there was still an uncertainty about what the validity of the hypotheses should be tested against: the past or the archaeological record? (Binford and Sabloff 1982:149). Hence, he stressed once more the need for the development of 'a science of the archaeological record' (Binford and Sabloff 1982:151) and he claimed that the most crucial challenge facing archaeology was methodological and not theoretical (Sabloff *et al.* 1987:208).

In the light of the above, one might claim that, despite its contribution at a methodological level with the introduction of the deductive approach and the focus on variables and their relationship, processual archaeology came a full circle as far as its objectives were concerned. The primary aim of new archaeology, which was to fill in the gap of theory that Willey and Phillips

(1958) had detected (see also Renfrew 1983), and to explain cultural change, seemed to have remained unsolved. Processual research, despite its claims, finally concentrated more on methodological issues than on theoretical ones (Knapp 1996: 141). Having said that, one should probably stress that in this way, and despite of its claims, processual archaeology demonstrated in the most vivid way the indispensable links between theory and method.

Finally, some further reference should be made to the dichotomy between theory and method, or in processual terms, between 'middle-range theory' and 'general theory'. Binford, realising the complexity of the nature of the archaeological record, got involved into an approach that ended up being a 'mechanical tool', and had *'no role* in the explanations offered for the variability of the subject of interest' (Binford 1981:29). As a result, a gap, that was very difficult to bridge, was created between theory and method, and also a misconception among researchers, who in some cases considered 'middle-range theory' an adequate 'theoretical' programme for archaeology (see Raab and Goodyear 1984:260)

The debate about the relationship between theory and method is an old one in the history of archaeology. Whether the role of theory in actual research is made explicit, or is implied, its intimate link with methodology is quite broadly recognised today, and the process of creative research is usually described as a transition back and forth between theory and method (Renfrew and Bahn 1991, Hodder 1985, Raab and Goodyear 1985). In the following period (post-processualism), this problem of dichotomies would be highlighted even more, and would constitute a focal point in the criticism of the processual approach.

Despite the shortcomings, processual archaeology had a significant influence over further developments. The ultimate aim, for a 'science of archaeology', with 'objective' and 'accurate' results, however 'over-optimistic or naive', led to a greater awareness of methodological procedures and improved research at all levels. The identification of specific variables, the recognition of patterns and the validations of hypotheses constitute broadly accepted procedures today, and they are common practice in settlement archaeology (see chapter II).

1. 2. 3 Post-processual period[iii]

i) *what does the archaeological record represent?* : Post-processual archaeology came mainly as a reaction to the over-positivism and over-determinism of New Archaeology. For Ian Hodder, who laid the foundations of post-processualism as a distinctive movement, the archaeological record was a

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[iii] Post-processualism partly due to its short history and party due to its calls for diversity and multiple interpretations, has displaced a remarkable degree of multivocality (Patterson 1989, Watson 1991, Thomas, J. 1995). Furthermore, there seems to be no crystallised idea yet of what a post-processual approach to the archaeological material should be. Hodder himself has many times reconsidered his ideas (1986, 1990, 1991). As it would be impossible to provide here a comprehensible review of post-processualism, I have mainly focused on Hodder's initial statements (1986) which have provided the foundation for most of the later developments.

'text' to be read (Hodder 1986:125). In that sense, emphasis was given more to the interpretation and meaning of the archaeological record, rather than its physical components.

> "Material culture does not just exist. It is made by someone. It is produced to do something. Therefore it does not passively reflect society- rather, it creates society through the actions of individuals" (Hodder 1986: 6).

Compared to earlier statements, the above definition about material culture differs in two aspects (Hodder 1986: 125,13): i) culture is meaningfully constituted and therefore apart from a practical, technological and functional dimension which was mainly the focus of processual studies, it has also a symbolic dimension, and ii) the relationship between behaviour and material culture depends on the actions of individuals within particular culture-historical contexts. Consequently, material culture is not anymore the passive 'by-product' of human behaviour, as it was usually conceived by both "traditional" and processual archaeologists.

. Based on these arguments Hodder (1986) turned to the importance of context for the study of material culture. The concept of a physical context, in the form of stratigraphic sequences, has a long history in archaeology. At a theoretical level, context gained great attention already from the pre-processual period, with Walter Taylor (1948) who put special emphasis on the importance of this aspect of the record in his research (see above). Moreover, one can argue, that though implicitly used, in processual approach there was also employed a concept of context, in the sense that all specific variables under examination were perceived to belong in a larger functioning whole (this being either behavioural, technological or environmental).

Acknowledging this background, Hodder took the issue one step further. He claimed that, apart from the types of context mentioned so far in the literature, there is another one that seems to have been ignored by scholars:

> " ...context can be taken to mean 'with-text', and so the word introduces an analogy between the contextual meanings of material culture traits and the meanings of words in a written language. The argument is that objects are only mute when they are out of their 'texts'; but in fact most archaeological objects are, almost by definition, situated in place and time in relation to other archaeological objects. This network of relationships can be 'read', by careful analysis...Of course, our readings may be incorrect, but misreading of the language does not imply that the objects must remain mute" (Hodder 1986: 153).

ii) *the theoretical environment in which the 'ideas' about the archaeological record developed*: In order to gain a better understanding of the framework in which these ideas about the record have been developed, it seems necessary to refer briefly to the main 'doctrines' of post-processual archaeology. Hodder summarises the new ideas, and their contrast with the processual way of thinking, in four succinct points (Hodder 1985:2-3):

1) 'People are active'; therefore social rules are not just imposed on people but are constructed by them at an equal degree.

2) Dichotomies such as system vs. culture, function vs. meaning and process vs. norm should not exist; the emphasis on cross-cultural regularities, processes and the function of systems, has led so far new archaeology towards a 'reductionist' approach which saw material culture as a 'product of adaptation with the environment' (Hodder 1986:4), without any reference to meaning or cultural context. As a result, processual archaeology, despite its claims, did not explain anything as long as the patterns that it provided still had to be interpreted.

3) 'Facts and theory are not opposed, they are intertwined'; The 'facts' available in archaeology are themselves interpretations made by field archaeologists as they work and if one is to separate data and theory is like attempting to 'evaluate the fit of predictions to observations' (Hodder 1985:12). Therefore the distinction between objectivity and subjectivity, so much advocated by processualists, does not exist either.

4) 'Social change is historically dependent'; Consequently, any attempt to understand it should take into account the context in which it has been developed as well as the cultural particularities.

After the dissatisfaction of processual determinism, the cross-cultural generalisations, and the behavioural laws, Hodder turned to history (Hodder 1986), and at the same time, to the very early stages of anthropology and sociology, when Boas was aiming to understand cultures from inside ("subjective understanding"), and Malinowski was studying culture by an "intimate knowledge of an individual and his cultural environment" (Fagan 1972). Similarly, Hodder tried to understand 'each cultural context in its own right' and he claimed that one can only do archaeology when [s]he starts 'making assumptions about the subjective meaning in the minds of people long dead' (Hodder 1986:82). According to post-processualists, as long as 'part of our reconstruction of the past is dependent on our own world view', the ultimate aim for archaeologists 'can only be self-knowledge. In projecting ourselves into the past, critically, we come to know ourselves better' (Hodder 1986: 106).

iii) *methodological procedures employed for the examination of the archaeological record*: As a way to approach this kind of analysis, Hodder (Hodder 1986:149, 1991: 10-12) suggested 'critical hermeneutics'. The concept relates to methodological procedures in the discipline of history, where hermeneutics is the science of interpretation, 'traditionally applied to the discovery of the real but hidden meanings of sacred texts' (Hodder 1986:150). The only way to understand the human world according to the methodological procedure of hermeneutics, is by asking questions. However, as every question is determined by an interest that underlies it, at the same time it already 'prefigures' a certain answer. As a result, any interpretation of the past is 'bound into a question and answer procedure which is rooted in the present' (Hodder 1986: 151).

This reasoning, according to Hodder (1986), applies to the whole spectrum of archaeological procedures and it is also valid in the relationship between theory and data:

> " the real world does constrain what we can say about it, it is also clear that the concept of 'data' involves the real world and our theories about

> it. As a result, the theories one espouses about the past depend very much on one's own social and cultural context." (Hodder 1986:17)

The consequences that derive from the above argument are quite obvious:

> "there can be no 'testing' of theory against data, no independent measuring devices and no secure knowledge about the past." (Hodder 1986:18)

Hodder realised that the new approach had the danger to lead into relativism, and right from the beginning he stressed that his aim was not to create an archaeology that becomes prey to special interests and the notion that "...'anyone's interpretation of the past, however unrelated to the data, is equally valid" (Hodder 1986: 187). His idea about developments in the discipline, involved diversity in explanatory models and 'lack of consensus' but with emphasis to the fact that some answers "can be demonstrated to relate to the evidence better than others" (Hodder 1986: 151). However, one should note, that according to the hermeneutic circle 'in which no interpretation is possible until interpretation has begun', this distinction between patterns (evidence) and interpretations (answers) does not seem to exist, as long as the patterns are interpretations themselves (see also Johnsen and Olsen 1992, Kosso 1991).

Right in the root of this problem seems to be the unfortunate (yet for some researchers necessary) effort to 'transplant' into archaeology for one more time, 'foreign' concepts. When historians were talking about questions that are already determined by the interest that underlies them, they had in mind a particular text that these questions applied to. The interpretations might have been as many as the readers, but the text was one. In archaeology, on the contrary, the text is partly created by the readers themselves. So, before we start 'reading', we have first to decide precisely *which* text we are reading.

One of the aims of the present thesis is to tackle exactly the above issue, and examine which is the available archaeological evidence, namely the 'text', for the study of the way domestic space was used in Neolithic Eastern Mediterranean. My contention here is to show that for archaeology the 'text' is the 'stratigraphic context', and it is this type of information that I seek to identify in the material record of Eastern Mediterranean.

At this point however, some further reference should be given to the theoretical framework of the two approaches (processualism and post-processualism), as well as an outline of the current developments and the way archaeological record is approached today (sections 1.3 and 1.4).

1.3 The nature of the archaeological record

Contributing to the current debate of what the archaeological record represents and how it should be approached, Linda Patrik in 1985 attempted, for the first time in the history of archaeology, a philosophical examination on the matter, defining the record as a theoretical concept and specifying the metaphysical implications of both processual and post-processual approach. A

brief outline of her analysis is considered quite important at this point, because it can help, first to specify the actual differences between the two approaches, and second to identify the degree of understanding that has been achieved so far in relation to the nature of the record.

> "To conceptualize archaeological evidence as an archaeological record is to adopt a model of this evidence that has important implications for archaeological theory." (Patrik 1985:54)

The idea that the archaeological evidence constitutes a record, bears the implication, which derives from the definition of the word itself, that there are two interpretative models that could be ascribed to material remains: a physical model (fossil record) and a textual (historical record). Processualists based their approach on the physical model which supported their optimism and qualified archaeology as a science, while post-processualists concentrated on the textual model that draw attention to the structural and symbolic elements of the data.

The first definition refers to palaeontology and sees at the archaeological evidence, 'static, physical things that are the causal effects of what they record' (Patrik 1985:33). The recording connection is therefore a causal connection between physical effects and their causes, and in that sense the model is directly related to the Hempelian deductive-nomological model of inferences that was initially adopted by new archaeologists (see above).

However, if archaeology relied only on the Hempelian model of inference it would still not be justified to attempt and extract past causes from the record, because one cannot deduce a cause from an effect. For this reason new archaeologists had to use the metaphor of the 'fossil record', which provided archaeological interpretations with inferences that would have 'unambiguous references in the past' (Binford 1982:131). According to Patrik (1985:45):

> "there are three kinds of physical recording connections that link present physical things to 'unambiguous references in the past'... I) the recording connections of physical remains (e.g. skeletons), 2) the recording connection of what is substantially equivalent to something (e.g. fossil) and 3) the recording connection of unique, nomological traces (e.g. fingerprints)".

As archaeological evidence is equated with a physical record that records its causes in the way that 'fossil records' do, it is implied that it has the same kind of physical recording connection, and therefore its inferences are justified.

However, the question about what kind of recording connection characterises archaeological evidence is not an easy one, and archaeologists soon realised that their model was rather inadequate. As mentioned in the preceding review, Binford finally rejected the model of a 'fossil' record, pointing to the fact that the archaeological record is formulated by dynamic processes. Schiffer on the other hand used the physical model mainly in order to analyse the distortion in the archaeological record, rather than to describe the evidence comprising the record itself. Yet, with this last shift in the meaning of the physical model, more complicated problems arise, as the archaeologists are now

called upon to distinguish between 'what distorts the record and what is recorded by the record' (Patrik 1985:52)

The second model that relates to the 'historical record' has quite a different approach. Emphasis is now placed on the human activity that produced historical or archaeological evidence and also on the fact the material remains have been distributed spatially through behaviour that was regulated by convention. Because 'many of these conventions were culturally specific', they should be describe more like 'rules of grammar' than natural laws (Patrik 1985: 34). The textual model therefore perceives material remains as a body of symbols and is interested in understanding cultural contexts and meaning (see above).

The main methodological problems that derive from such an approach have been already explored by Hodder (Hodder 1982: 8-9), and are summarised by Patrik in the following extract:

> "1)the problem of how to discover the unobservable, underlying codes that structure material symbols (the problem of paleopsychology); 2)the problem of never having archaeological access to the complete material, behavioural, and social context of any material symbol (the problem of incomplete context); 3) the problem of attempting generalisations about a culture from fragmentary material symbols, which may have belonged only to an elite, to certain classes, or to a certain gender (the general problem of history); 4) the problem of relying upon material symbols that may have been used to mask or subvert the power relations in past cultures (the problem of ideology)." (Patrik 1985: 52)

Despite the problems that derive from both models, their contribution to the understanding of the nature of archaeological evidence has been very significant. The debate about the first model (fossil record), shed light on the dual nature of archaeological information (Schiffer 1976), and pointed to the existence of both cultural (systemic context) and natural (archaeological context) processes in the formation of the archaeological record. Post-processualists, on the other hand, by stressing the importance of meaning and context in material remains, made obvious that archaeological record is much more complicated than it was initially thought, and opened the way for revisions on both theoretical and methodological issues.

Patrik, in her evaluation of the two models, suggested that they probably apply to different levels of archaeological evidence:

> "...the physical model seems more appropriate for archaeological remains and the textual model for the original material artefacts, in use and as deposits. They could be synthesized by treating one as the temporal, causal consequence of the other...Archaeological evidence is like a fossil record of a past body of material symbols; when these symbols were produced, actively manipulated and deposited, they were composed like a textual record." (Patrik 1985: 55)

Hodder, on the other hand, though recognising the existence of both types of recording in the archaeological data, insisted that they should not be examined separately: "because each is necessary to the other and is routinely involved in the other" (Hodder 1986:183).

No matter how one conceives the relationship between the two models: in a ranking order (Patrik), or as one entity (Hodder), it is evident that they both represent aspects of the archaeological record, and therefore, any investigation on the nature of the record, should take into consideration both approaches.

1. 4 Current perspectives

If the archaeology of the 80s was an archaeology of conflicting attitudes: a 'radical scepticism' opposed to a 'crude scientism' (Shanks and Tilley 1987b: 243), the archaeology of the 90s seems to be that of multiple perspectives and multivocality: 'archaeologists must learn to live with the notion of mutually irreconcilable views about the past' (Knapp 1996: 148).

Archaeology has now become 'social', 'critical' and 'interpretive', has opened up to human sciences, to history, philosophy, sociology and has included among its new areas of interest, gender, politics, ethnicity, identity and a critique on archaeological writings and interpretations (Bintliff 1991, Thomas and Tilley 1992, Gardin and Peebles 1992, Yoffee and Sherratt 1993, Shanks and Hodder 1994, Barrett 1995, Knapp 1996). These developments were up to a degree inevitable. The emphasis on hermeneutics and on the 'social context' for the understanding of the past, soon brought archaeologist face to face with themselves, pointing to the fact that they were also part of a social system which formed and 'dictated' their own thinking and actions (Hodder 1991, Johnsen and Olsen 1992).'Being social involves consciousness' (Ingold 1986:136) and consciousness cannot but lead to a critical (Shanks and Tilley 1987a, Thomas and Tilley 1992) and reflective archaeology (Gardin and Peebles 1992: 390).

As already mentioned (see above), the dialectic nature of hermeneutics often seemed to be linked to relativism. Yet post-processualists, in order to avoid this route, are keen to stress that artefacts due to their 'materiality' do 'resist' to our interpretations (Shanks and Tilley: 1987a: 199, Barrett 1994:170-171) and point to some kind of 'epistemic relativism' (Knapp 1996: 145), an 'objectivism' (Hodder 1991b:15, 1991c, 1994, Johnsen and Olsen 1992: 432) which is usually based on political and moral arguments:

> 'There is no way of choosing between alternative pasts except on essentially political grounds, in terms of a definite value system, a morality.' (Tilley and Shanks: 1987a: 195)

Two comments should be made at this point: a) the necessity for 'moralities' to be open to negotiation and dialogue concerning their actual form, and to leave space for 'other' moralities, 'non-western' and 'non-English', because 'the real problem lies not with those who write from a particular viewpoint' but rather 'with those who believe they are writing objective, apolitical, ideology-free archaeology' (Knapp 1996:145), and b) the fact that the vary nature of hermeneutics seems to be related more to an ontological issue than a methodological one, in other words: 'it concerns more *how* we understand than *what* we understand' (Johnsen and Olsen 1992:433). Indeed,

it is not surprising, that ontological questions seem to be at the heart of the current post -processual debate (Barrett 1995a).

Turning to methodological issues now, what it is clear is the fact that post-processualism was built, based on patterns provided by processual methods (Hodder 1986:193, Tschauner 1996). Post-processual writers always acknowledge and accept the importance of the methodological achievements of New Archaeology, pointing at the same time, that methods in themselves can interpret nothing (Shanks and Tilley 1987b: 245, Thomas and Tilley 1992: 108). One has to keep in mind however, that processualism, despite its contribution, has not actually provided any 'solutions' in methodological terms, but rather opened the debates and indicated the problems (Renfrew 1983:3).

Commenting on both approaches, John O'Shea (1995:540) describes in a very clear way the current situation, observing that while New Archaeologists have spent 'the past two decades' trying to find the methodological tools in order to 'bridge the gap between the archaeological contexts of the present and human behaviour in the past', post-processualists, argue for an abandonment of 'such concerns altogether'.

No critical approach however, can avoid dealing with archaeological practice at some point, and it is encouraging that in his latest review on archaeological issues, John Barrett, chooses to refer extensively to the nature of archaeological stratigraphy and its role (Barrett 1995:8-11). Despite his critique on traditional methods and his plea for a shift in priorities when presenting stratigraphic information toward historical interpretations, he is clear in stating that: 'These [different principles] will *not override* the basic sequential relationships, they will move *beyond* them to rebuild the world as it may have been inhabited' (Barrett 1995:10).

This issue of stratigraphy is directly related to the present thesis (chapter III), although it is addressed from a more practical point of view. Our analysis is based on archaeological context and stratigraphic sequences in an attempt to show that archaeological patterns which so often are taken for granted by post-processualists, need to be examined thoroughly and should be equally submitted to theoretical scrutiny.

In one of the most recent reviews on theoretical archaeology (Yoffee and Sherratt 1993) attention has been drawn to the 'vacuum' between positivism and relativism, optimism and pessimism, that processualism and post-processualism have created, and the need for archaeology to develop its own theory and 'tools' in order to 'exist in a balanced community within an ecology of disciplines' (Sherratt 1993):

> "As a discipline with its own specific types of evidence, archaeology generates its own concepts which are not necessarily congruent with those of any other discipline...A healthy archaeology requires a diversity of types of subject-matter, both to heighten the contrasts and to maintain links with relevant debates in neighbouring subject areas. ... archaeology needs to be configured as a set of open networks, rather than compartmentalized as a series of specialist studies" [Sherratt 1993:126]

> "It is only when archaeologists are able to build social theory on an intra-archaeological data base and using an intra-archaeological comparative method... that archaeological theory can said to flourish"(Yoffee and Sherratt 1993:8)

Despite the positive nature of such proposals, the call for intra-disciplinary databases bears resemblance to processual doctrines and it is not easily accepted by post-processualists (Thomas 1995). Furthermore, older attempts by the French school (Gardin 1958, 1980) to construct standardised archaeological databases, seem to have led to stagnation (Cleuziou *et al.* 1991:100-102).

Setting aside the criticisms however, the above suggestion, highlights some very 'real' problems for archaeology, which sooner or later have to be addressed: a) the fragmentary nature of the archaeological record and b) archaeology's potential to define its own subject area in relation to other disciplines.

. The fragmentary nature of the archaeological record, is usually regarded as the main problem in any kind of archaeological investigation (see also Bradley 1993:132). During the processual period, it was the main reason that led new archaeologists to the application of interdisciplinary methods, either with the use of statistical programs that were meant to reveal 'hidden' patterns, or with ethnographic analogies which always provided more reliable information. Similarly, it was the very nature of the archaeological record that caused the suspicion towards the previous optimism, and led post-processualists to the acceptance of alternative pasts. As already mentioned (see above), many methodological problems and problems related to the identification of site formation processes, require the development of special techniques and the aid of special subfields (e.g. environmental studies, experimental archaeology and ethnoarchaeology) and neighbouring disciplines (e.g. ethnography and geography), (see also chapter II). One should keep in mind however, that the role of these subfields is not to work in isolation but in relation to each other.

Finally, as far as the issue of the relationship of archaeology with other disciplines is concerned, the developments in the discipline seem to point both to a history of regionalism, and at the same time a history of close links with disciplines that study human culture. Archaeological record itself allows this kind of dualism. On one hand, the nature of archaeological evidence points to a certain degree of isolation: different material cultures, different characteristics, different problems. On the other, however, the very subject-matter of archaeology, which is the study of human culture in the past, is strongly linked to the subjects of a whole range of other disciplines (e.g. ethnography, history, sociology). The uncertainty about archaeology's scope and position among social sciences, becomes therefore rather inevitable.

1. 5 Conclusions

In the light of the preceding review it became evident that the debate about the nature of the archaeological record has a long history and is directly related to the ideas that archaeologists have

had about the aims and the nature of their discipline. The degree in which this debate influences archaeological work in a practical level, varies according to local traditions and to the role that archaeology is called upon to play in the socio-political structure and historical identity of every particular country (see for example, Hodder 1991, Ucko 1995). Similarly, the position that each individual researcher takes on the subject, depends on the social and cultural context that [s]he belongs and it can simply be a matter of personal choice and persuasion. The debate however, does exist, and every archaeologist with his/her work, consciously or unconsciously, takes part in it.

The relation of the present research to the above debate about the nature of the archaeological record, is significant because of the subject-matter under examination which is the identification of the use of domestic space. The analysis of such a synthetic topic, which necessitates a review on stratigraphic sequences and an attempt to place objects and features in their stratigraphic context, meant that one had actually to deal with one part of the archaeological record 'as a whole'. It seemed therefore necessary to seek and understand first of all the nature of the particular 'object' (in this case 'the archaeological record') under examination. This is obviously a very difficult task, but due to its importance for archaeology, any attempt is worth making.

In summarising, one could therefore say, that set in an environment of contradicting metaphors about the way that material culture could be interpreted, our understanding of the 'nature' of the archaeological record has been improved significantly in the last decades.

The archaeological record consists:

a) primarily of physical remains,

b) it is static and spatially distributed, and

c) it is the result of both cultural and natural *dynamic* processes.

The first of these characterisations indicates what we, as archaeologists, find in the field, the second what we recreate via our excavations and writings, and the third what we try to understand and interpret. Despite its fragmentary nature, the archaeological record is characterised by two other very important attributes: a) its contextual information (with the potential to provide 'meaningfully structured patterns'), and b) its unique character, of offering access both to everyday life and 'the dynamic of long durations', at a local and cross-cultural level.

What it is argued in the present thesis, is that in parallel to all the 'technical aid' for the understanding of the archaeological record, archaeologists should also approach it from a more holistic point of view. What we have seen so far is its fragmentation: initially its objectification (pre-processual period) and later its conceptual and technical fragmentation into systems and areas of 'meaning' (processualism and post-processualism). Without undermining the importance of specialised studies, it will be argued that another equally important field of enquiry, is the view of the record as a whole in contextual terms. The following analysis will attempt such an examination, reviewing the material from Neolithic Eastern Mediterranean from a contextual point of view and at

a cross-cultural level (chapter III, IV, V). Before the analysis however, it is necessary to examine the way that archaeological evidence has been approached in spatial studies (chapter II).

CHAPTER II

SPATIAL STUDIES - ANTHROPOLOGICAL MODELS - AND THE ROLE OF ARCHAEOLOGY

> "The model could be tested...by digging Natufian/PPNA huts separately, analysing their contents separately, and using statistical programs to identify the number, sex, and age of the occupant(s) of each hut. I would be willing to collaborate in such a study, but am not holding my breath until it happens: *most of my Near Eastern colleagues would rather be buried up to their necks in fire ants than have to test an anthropological model.*" (Flannery 1993:115)(emphasis added)

2.1 Introduction

Spatial studies examine the spatial relationship that characterises archaeological evidence, and in that sense provide a unique source of information about the way that past societies organised themselves and interacted with each other and their environment. Despite the significance of studies based on more specific themes (such as pottery, tools, economy, or technology etc.), the spatial association of the archaeological finds is always of interest to archaeologists, because it sets the evidence in a wider context and allows a more complete assessment of the available information. Moreover, spatial studies play an important role in the recovery of patterns, which constitute the backbone of any kind of archaeological reconstruction and interpretation.

Archaeology has often turned to other disciplines in order to seek aid for the understanding of its fragmentary record. Especially at the level of the identification and explanation of patterns, the use of the 'ethnographic experience' and anthropological models is quite common in the field. As it has been already shown (chapter 1), during its history, archaeology was related to several disciplines: from a period of strong dependency on ethnographic analogies in the beginning (end of 19th century), it went through a renunciation of traditional models and gave emphasis on its links with disciplines such as geography and statistics (middle of 20th century), while recently, it turned to a period of re-evaluation of the importance of ethnographic research and the introduction of the new subfield of ethnoarchaeology.

However, despite the continuous debate, it seems still unclear, how far disciplines like ethnography can help to the understanding of archaeological evidence and moreover, archaeologists

are often accused of being reluctant to take advantage of the suggested anthropological models (Flannery 1993:115).

Spatial studies seem to be directly related to this debate about the relationship between archaeology and anthropology, for two main reasons: first, because the multiplicity of spatial information could be considered the most adequate subfield against which the applicability of an anthropological model could be tested, and second, because an anthropological model could indicate variables and meaningful ways of measuring and ordering the vast amount of information that spatial studies deal with.

In the past decade there seems to be a dissatisfaction with the state of research at this field, both at a theoretical (Whitelaw 1989, Kent 1987) and a methodological level (Kent 1984, Whallon 1984, Gamble 1991), while, at the same time, the role that archaeological evidence can play in the investigation of relevant issues seems to have been lost somewhere in the middle, between statistical methods and ethnoarchaeological models.

The aim of the present chapter is twofold: a) it examines the methods that have been used so far for the study of spatial associations in the archaeological record, and the specific direction in which they have led archaeological enquiry (2.2), and b) it deals with the issue of anthropological models in archaeology: their purpose, their nature and the problem of their applicability on archaeological evidence (2.3). Despite the fact that the focus of the present research is mainly on the level of individual structures and the ways in which their use and role in settlements can be identified, it has been considered necessary to outline initially the general context in which spatial studies developed, in order to illustrate their influence by the different schools of thought (previous chapter), and justify in this way the necessity for the analysis conducted in the present thesis.

2.2 Spatial studies in archaeology- methodological and theoretical issues

In 1977 David Clarke attempted to define a special subfield for archaeology that would deal with the particular problems of the spatial association of archaeological remains. The field was called 'spatial archaeology' and its main task was:

> "...the retrieval of information from archaeological spatial relationships and the study of the spatial consequences of former hominid activity patterns within and between features and structures and their articulation within sites, site systems and their environments...The elements principally involved are raw materials, artefacts, features, structures, sites, routes, resource spaces and the people who ordered them." (Clarke 1977:9)

It is obvious that such an approach has no temporal or regional limits. It can deal both with historic and prehistoric sites, and it refers to the spatial relationships of all kinds of archaeological sites (such as settlements, cemeteries, caves or mines).

In the following section, we will discuss the two main methodological trends according to which spatial information has been approached by archaeological research so far: i) statistical techniques (2.2.1) and ii) ethnoarchaeology (2.2.2). The first is usually considered helpful for the recognition of patterns in the archaeological record, while the second provides a basis for the identification and interpretation of these patterns.

Both approaches have been more or less the result of 'processual thinking', which demanded a 'scientific' archaeology and stressed the importance of an interdisciplinary dialogue among related fields. However, despite their contribution to archaeological enquiry, these methods do not seem to have found yet a common language of communication with archaeology. Statistics always seem to be too 'technical' and distant from archaeological reality (Whallon 1984), while ethnoarchaeology rarely manages to overcome the stage of 'cautionary tales' (Gamble 1991).

The aim of the following discussion is to give a brief outline of the route that each of these approaches followed in the archaeological field, to examine the problems and the limits that they pose for archaeology and to assess their impact on methodological and theoretical issues.

2.2.1 Quantitative methods and their impact on spatial studies

The development of spatial studies in archaeology is very much related to the traditional links with neighbouring disciplines (geography and biology) and the technical improvement of quantitative methods and statistics during the processual period. What in the beginning was thought to be, a more scientific and 'objective' way of describing spatial patterns, soon became an unavoidable component of any kind of research with a relevant subject, and at the end, during this period, spatial analysis was simply equated with statistics.

The following section outlines the impact that quantitative methods had on spatial studies, and their influence in the formulation of a new agenda for archaeology. The review will concentrate on three main issues: I) the origins and the historical links of quantitative methods to spatial studies, ii) the main areas of interest, the objectives and the difficulties that were formulated by the utility of quantitative methods, and iii) some issues of misunderstanding and confusion that the application of quantitative techniques has caused to the field of archaeology.

i) Quantitative methods and spatial studies: origins and historical links

Despite the increasing importance that quantitative methods gained in archaeology during the past decades, they have, as a matter of fact, a much longer history in the discipline. David Clarke, in his attempt to justify the study of spatial associations as a new subfield, clearly stressed the significant role that distribution maps and classifications had already played in traditional archaeology:

> "spatial archaeology was one of the twin pillars of traditional Montelian archaeology - the central pillars of the typological

> method and distribution mapping; the study of things, their classification into categories, and the study, interpretation and explanation of their distributions " [Clarke 1977:5]

Furthermore, one should keep in mind, that the main methodological developments in spatial studies during that period, were strongly related to practices adopted by biology and geography (Clarke 1977:2-5, Aldenderfer 1987:18-19, Hill and Evans 1972: 233-249, Earle and Preucel 1987: 503).

First, there was the influence of the Austro-German school of 'anthropo-geographers' in Europe, at the end of the 19th century(1880-1900), who were mapping and comparing correlations between prehistoric settlement patterns and environmental variables, while at the same time, they were trying to 'explain culture complexes through the specific location of attributes and artefacts' (Clarke 1977:2). Their impact in the archaeological field became evident soon: in the beginning through the belief that settlement patterns were 'conditioned by landscape and geography' (Williams and Freeman 1881, Guest 1883, Crawford 1912) and later, in the 1930s, through the research of several scholars (Fox 1932, Childe 1934) who based on a series of archaeological and environmental distribution maps, attempted to examine the changes of specific regions and countries over several millennia.

At around the same period, in the first half of the 20th century, biology seems to have been another pole of influence for archaeology. The adoption of hierarchical schemes became soon common practice, utilised first by cultural anthropologists in the United States (Driver and Kroeber 1932, Kroeber 1940, 1942, Krieger 1944, Rouse 1939) and later, in the form of numerical taxonomies, by researchers in Europe (e.g. Doran and Hodson 1966).

With such a background, and along with the technological improvements of the '50s (Clarke 1973), quantitative techniques started flourishing in archaeology. One of the most influential works during this period, was the 'settlement patterns survey' that Gordon Willey conducted in 1953. Willey (1974) describes in a very detailed way how he was convinced by Julian Steward, a social anthropologists and the founder of cultural ecology (see chapter 1), to withdraw from the descriptive historical and chronological oriented 'stratigraphic race' and undertake the particular project. The following extract reveals a whole era in archaeological history, where despite the dissatisfaction with traditional methods, there was still uncertainty for the route that future research should take:

> "I would be doing more for the project, myself, and archaeology, he argued [Steward], if I attempted to say something about the forms, settings and spatial relationships of the sites themselves and what all this might imply about the societies that constructed and lived in them ... In fact, in that 1946 field season, as I walked over the stony seemingly endless remains of Viru's prehistoric settlements, I felt I had been misled by Steward and dealt a marginal hand by my colleagues. The latter were getting tangible pottery sequences to delight the heart of any self-respecting archaeologist while I was chasing some kind of wraith called "settlement patterns" that had been dreamed up by a social anthropologist." (Willey 1974:153 - 154)

Having this background, the archaeology of '60s and '70s attempted to create a general theoretical framework for settlement studies, by defining their scopes and systematising the methodological attempts so far. Examples of this attempt constitute a number of synthetic works by Trigger (1968), Chang (1968), Tringham (1972) and Clark (1977). Settlement archaeology was now divided into three levels of analysis: individual buildings (micro), settlement sites (semi-micro) and settlement distributions (macro) and special emphasis was given in the investigation of 'spatial relationships between things' (Clarke 1977:5) rather than things themselves. As it has been already shown (chapter 1, see also Klejn 1977:9), Taylor and Steward had pointed towards this direction of analysis long ago, but it seems that only now, after the impact of Willey's work and within the general 'scientific atmosphere' of processual archaeology, the new way of approaching spatial information seemed feasible and attractive. Nowadays, the above three levels of analysis have evolved into several specialised directions (Knapp 1997: 6-13), but as it will become evident from the following review, some areas have been developed more than others.

Finally, it is important to keep in mind, that quantitative methods and spatial studies are directly related to the idea of classifications and typologies (Clarke 1977:5), and it is worth noting that during this period, there is also a tendency to reconsider and revise the systems of typology that had been used so far. Spaulding (1954), as a reaction to the traditional approach, emphasised the fact that types were actually 'discovered', and consequently one could 'find' and manufacture many different kinds of types, while Binford (1965) pointed to the variability within and among cultures and the fact that types could not possibly be the manifestations of one thing.

This general belief, that 'materials can be typed in a multiplicity of ways, depending on the specific problems and hypothesis of the investigator' (Hill and Evans 1972:255), found its theoretical support, as we have seen (chapter 1), in the hypothetico-deductive method of Carl Hempel (1966:13), and constitutes the main methodological orientation of processual archaeology.

All these different parameters: the historical links with geography and biology, the new interest in the study of spatial associations, the revision in the concept of typology and in general, the new methodological orientations of processual archaeology, led to a rapid increase of the interest in settlement and spatial issues. The abundance of the new available techniques was rather misleading however, because researchers focused mainly on the innumerable applications of different methods and put little effort in testing their validity for the needs of the archaeological record.

ii) Fields of interest, objectives and problems

Due to the vast amount of research that has been done on the specific issue, it would be impossible to present a detailed account of the case studies that have used quantitative methods for the recovery and study of spatial patterns, in all three levels: of buildings, communities and regions. Instead, an attempt will be made to observe the developments in this field, through the examination

of two seminal works (Hodder & Orton 1976, Hietala 1984), which epitomise the research that has been done in the field in the last decades and point to the main problems that archaeology had to face in relation to the subject.

Spatial studies in archaeology, by Hodder and Orton (1976), was the first systematised attempt to evaluate the techniques used so far and pinpoint the problems of their application on the archaeological record. With that book the need for quantitative approaches was firmly established and the new methods were considered the only means that could cope with the difficulties and the problems on the particular issue of spatial patterns. As a result, in the literature of this period, spatial analysis was almost always equated with statistical techniques.

For the purpose of the present discussion, three main points from this book need to be highlighted : i) its area of interest, ii) the reasons which justify the use of the specific techniques in archaeology, and iii) the main problems related to statistical techniques.

With regard to the first issue, it is important to note that research in the book focuses mainly on two subjects: settlement patterns and artefact (or trait) distributions, a fact that seems rather reasonable if one bears in mind that quantitative methods were 'introduced and adapted by other disciplines, in particular geography and plant ecology' (Hodder and Orton 1976:1). These particular subjects are affiliated to earlier themes in the history of archaeology, such as diffusion patterns, trade or invasions (Knapp 1997:10), but they tend to overlook an intermediate level of analysis: that of communities and spatial variability within settlements.

As far as the reasons of justification are concerned, it is quite evident that behind the application of quantitative techniques there is a whole ideology of what the archaeological record represents and how it should be approached (see also chapter 1). Outlining the main reasons that support the need for statistical methods in archaeology, Hodder points out that :

> "A quantitative approach would seem to provide a *clarity* in the demonstration of spatial trends, patterns and relationships. It also provides a certain *objectivity* in the analysis of these patters. The techniques also often lead to the discovery of patterns *not revealed by usual archaeological analysis*, and thus provide something for the archaeologist to explain. The methods aid the *testing* of hypotheses about spatial processes, allow *large amounts of data* to be handled, and *enable predictions* to be made about the location , importance and functioning of sites." (Hodder 1976:241)(emphasis added).

In this small extract one can see the objectives and the reasoning of the whole processual era. The eager for a more 'scientific' archaeology ('clarity', 'objectivity', 'testing'), the disappointment with past methods ('patterns not revealed by usual archaeological analysis') and the optimism ('allow large amount of data to be handled and enable predictions), are all here, and they make the application of quantitative and statistical methods, *a must*.

Finally, with regard to the problems, prospects seemed less certain. Although the discussion below refers mainly to settlement patterns, it is quite fundamental for spatial studies in general and still remains valid for current research.

The problems identified could be divided into three categories (Hodder and Orton 1976:237-241): the first is related to the nature of the archaeological evidence, the second to the methods and the applications themselves and the third to the more general problem for archaeological interpretations, that of inferences.

The first issue touches upon the survival of archaeological sites, and the problem of whether the available patterns of site distributions are actually reliable, or they are the result of erosion, destruction or even local archaeological interest. According to the authors, there is a number of ways in which one could cope with this kinds of problems (Hodder and Orton 1976:237-238): 'detailed examination of past and recent activities and practices of land use', comparison of the ways in which different materials are distributed, further fieldwork, and application of more accurate dating techniques in order to tackle the problem of contemporaneity among site distributions. It is recognised that for the application of quantitative techniques the availability of 'good data' is crucial and is hoped that archaeologists, stimulated by the potentiality of these techniques, will 'collect in the future more data of high standard'. At this point it has to be stressed however, that despite the methodological and technological improvements in data collection (Knapp 1997: 8), the request for 'data of high standard' is still in demand (see chapters of analysis: IV and V).

The second issue which is related to the applicability of specific methods and techniques on the archaeological data, is tackled either with the application of further statistical tests, or the utility of high speed computers and the collection of additional information (Hodder and Orton 1976:239). It is worth noting, that despite the general optimism for the potential of the techniques, there is a degree of uncertainty about their applicability and validity, at least in relation to archaeological evidence. This particular issue will be discussed further below, but it should be kept in mind that it still constitutes a very *real* problem for current research (Whallon 1984, Baxter 1994).

Finally, for the third issue that refers to the problem of inferences in archaeology and the way researchers explain and interpret archaeological evidence, apart from the application of more sophisticated statistical methods (e.g. simulation of random walks), emphasis is also given to the need for more detailed analytical procedures and the construction of relevant theoretical models that would link forms with functions:

> "A value only becomes apparent if the functions chosen can be shown to be the result of relevant theoretical processes or have been found empirically to represent specific processes." (Hodder and Orton 1976:240)

This problem of inferences as well as the problem of site formation processes, that was initially overlooked due to the focus on settlement patterns, were to become two of the most crucial

theoretical issues for processual archaeology and finally led to the emergence of a new subfield, that of ethnoarchaeology (see below 2.2.2).

Almost a decade later, with Hietala's book on *Intrasite Spatial Analysis in archaeology* (1984), a more systematised attempt was made to solve the above methodological problems and at the same time to fill in the gap that was created by the focus on settlement patterns and artefact distributions. The vocabulary used is still almost explicitly statistical but now a wider range of issues is discussed, including post-depositional problems (Hivernel and Hodder 1984:97-115) and ethnographic studies (Kroll and Isaac 1984: 4-31, Ciolek-Torrello 1984:127-153). With regard to this book, two main points worth special attention: i) the topics that the contributors are dealing with and ii) the continuous debate about the applicability of statistical techniques in archaeology (Whallon 1984: 242-276).

Despite the claims of the editor that the contributions to the book cover a great range of time depth, 'from hunter-gatherers to complex civilisation studies' (Hietala 1984:1-2), a more careful examination of the subjects listed, points to a rather diverse pattern: from the 12 case studies, five refer to very early periods (Pleistocene, Palaeolithic, Magdalenian; with a time range of >1 500 000 B.P. - 14 000 B.P), two deal with prehistoric sites in the New World (covering a time range of 1400 - 1300 A.D), and the rest examine much later communities with very complex organisation (600 - 1970 A.D). The only paper that deals with a Neolithic period (Hivernel and Hodder 1984) investigates a methodological issue (post-depositional site formation processes), and pays little attention to matters of interpretation.

At a first glance the above pattern could be considered a result of mere coincidence. However, if one seeks the reasons behind this concentration on particular periods, very insightful results could appear, both for the constraints that the nature of the archaeological record in particular periods sets on spatial studies and for the preconditions that statistical methods set on archaeological enquires. This point worths some further attention:

In reviewing the nature of the archaeological record in Palaeolithic sites, one can see that they all share some common characteristics: i) they provide single surface layers, ii) they lack internal physical boundaries, and iii) their material remains mainly consist of flints and bones. Ian Johnson explicitly states some of the above characteristics:

> "My discussion is directed towards sites lacking internal physical boundaries which might otherwise serve *a priori* as delimiters of potential activity loci. This is the case for the majority of hunter-gatherer sites, where the physical barriers such as walls or windbreakers have decayed or never existed... Central to my reasoning is the concept of an assemblage as an unstratified archaeological site or a minimal subdivision of a stratified archaeological sequence." (Johnson 1984:76)

The importance of the above factors lies on the fact that this kind of record provides a certain degree of control to the data that is under investigation, and creates a safe environment in which statistical

programs can operate. Furthermore, it justifies the use of statistics, as discernible patterns among flints and bones are difficult to detect. Despite the potential of such approaches, however, their application to archaeology in general has obvious shortcomings: a) because single layers are quite rare in prehistoric sites, and b) because the lack of boundaries, though unproblematic for statistics, does not make possible the combination of clusters. The emphasis therefore still remains on artefact distributions rather than the combination of the information from different clusters which would have been more suitable for the study of whole communities. Researchers are interested either in intra-site assemblage patterning (variable clustering), or in artefact distributions on very specific locations (of a limited size), and in both cases the boundaries of the specific clusters are identified according to certain statistical programs.

The problem is highlighted by researchers themselves who admit their inability to combine information from different clusters on the same site and point to the need for further research. Characteristic example is that by Reid Ferring:

> "Full interpretation of this cluster, with respect to other possible clusters is not possible at present ... Data from Delaware Canyon provide an example of spatially defined activity areas, clusters, and occupation units. The relationship of these to settlement unit composition and the periodicity of site utilization requires more extensive excavations" (Reid Ferring 1984:125)

As far as the examples from the New World are concerned, they either approach the record in a similar way to Palaeolithic studies (Reid Ferring 1984:116-126), or, when examining spatial variability in a whole community, they rely heavily on ethnographic analogy, in order to identify the functional types of the features and artefacts they investigate (Ciolek-Torrello 1984:127-153).

Finally, with reference to more complex societies, the quality of the record seems to be more helpful for any kind of spatial study. Ciolek-Torrello (1984:130) in his discussion about the applicability of quantitative techniques, makes clear that:

> "Although frequently used in 'palaeolithic' cultural contexts, quantitative and associational statistical techniques are equally applicable to the study of the more complex organisation of later communities... A major difference is that in many of the later communities significant spatial units are already defined".

It becomes therefore evident that there is a vacuum even in the case of intra-site (community) studies. It is a vacuum which indicates that certain quantitative methods are applicable only on certain types of archaeological record and not on others.

In conclusion, one should stress the general problem of utility and purpose of quantitative methods in archaeology, which despite the significant number of case studies, still remained open, in the epilogue of Hietala's book. Robert Whallon, attempting to reconcile statistical techniques and archaeological reality, described the lack of communication between the two fields in the most vivid way:

> "Archaeologists are particularly ill-trained for, and unused to, the rigorous and logical thought necessary for the informed use of quantitative methods, while the rare statisticians who have tried their hands at archaeology typically have understood the nature of archaeological data, questions, and models only partially, vaguely, or incorrectly, so that their efforts are usually no better than the archaeologists' own." (Whallon 1984:243).

iii) Attempts for an evaluation

Because of the important role that quantitative methods have played in the examination of spatial associations in the archaeological record, some further reference should be given to the debate about their potential, their purpose and their misuse in archaeological research.

Despite the optimism of processual archaeology about the role that quantitative methods could play in archaeology and the belief that more or less any problem could be solved with the application of more statistics and mathematics, there were warnings about the misunderstanding and misuse of the new methods, right from the beginning of their introduction to the discipline. As early as 1964 Kaplan pointed out the difficulty in applying statistical methods on behavioural sciences and stressed the fact that 'statistical techniques are tools of thought, and not substitutes for thought' (Kaplan 1964:257).

Gradually, a whole range of papers came to light which had as their only purpose to discuss and criticise the validity of quantitative methods at every level. Articles that were questioning the utility of specific techniques (e.g. Numeric Taxonomy) (by Thomas 1978, and, Christenson and Read 1977), works that were trying to bridge the gap between quantitative methods and the specific problems in the nature of the archaeological record (Whallon 1984, Carr 1984), books that were approaching the subject from a wider theoretical perspective (Dunnell 1971, Whallon & Brown 1982, Aldenderfer 1987, Adams & Adams 1991) and also specialised analyses by statisticians (Baxter 1994). As already shown in the previous chapter, this inability of quantitative methods to incorporate 'human activities' and deal with issues of interpretation, constituted the backbone of the post-processual criticism to the processual movement as a whole (Knapp 1997:10, Shanks and Tilley 1987b:245), although one has to stress, that post-processual interpretations in many cases take the application of statistics for granted (Tschauner 1996).

The outcome of the above literature as well as a more careful assessment of the situation formulated so far, could be summarised in the following points:

The relation between statistics and spatial studies, is, by principle, very important. Spatial associations and functional attributes usually derive from taxonomic orderings, namely, "systems in which basic types are either clustered into larger groups or split into smaller ones, or both" (Adams & Adams 1991:202). It becomes therefore evident by definition, that for these kind of studies, statistics could play a significant role, because they could identify the strength (or frequency) of the association between two or more types.

The problem however lies in the realisation that archaeologists have not developed their 'own taxonomic algorithms' but instead they have borrowed methods from other disciplines (Adams and Adams 1991: 212). As a result there seems to be an incompatibility between methods and purposes in archaeology, because as Whallon put it:

> "It makes no sense to introduce into archaeological theory or models elements drawn from a methodology whose fundamental principles are essentially unrelated to the subject matter." (Whallon 1987:148)

Indeed, this lack of meaning and utility has been one of the severest criticisms of statistics in archaeology (Dunnell 1971:98-102), and their application has been usually characterised as 'an end in itself' (Adams & Adams 1991:275).

An additional reason for the confusion that has been created around quantitative methods, is the misunderstanding of what *is* their actual purpose and up to what degree they can help archaeological research. Statistics, and the utility of computers, 'seemed to bring within reach the long-elusive goal of objectivity' in the archaeology of '70s (Adams & Adams 1991:275), and became soon a panacea for any kind of archaeological problem or question. However, what must be realised and is repeatedly stressed by the experts (Baxter 1994, Whallon 1987, Fletcher & Lock 1991), is that these kind of 'exploratory techniques', as they are often called, "do not postulate an underlying model for the data and often have the, perhaps limited, aim of reducing data to a form which may be used to inspect the data for archaeologically useful structure or else present known structure in a compact form such as a two-dimensional plot" (Baxter 1994:1-2). They constitute therefore rather a descriptive than an explanatory tool.

As far as the objectivity is concerned, the archaeological thought nowadays has reach a quite satisfactory level of maturity, not to make this kind of claims any more, recognising that in all levels, from the selection of the specific variables, up to the evaluation of the quality of the data, there is the inevitable involvement of human judgement and decision-making (Adams & Adams 1991:294, Brown 1982:183-4).

Finally, and most importantly, archaeologists should be reminded that even for the most promising statistical package, is absolutely necessary, to have a preliminary stage of data inspection, in order to detect the most meaningful associations. Baxter, as a specialists, is making this point very clear:

> "Preliminary data inspection is essential before undertaking any form of multivariate data analysis and is sometimes all that is needed. The importance of such inspection, and a willingness to let common-sense override any itch to use multivariate methods because they are there, cannot be overemphasised" (Baxter 1994:27)

Based on the above, one could therefore conclude, that archaeological research on spatial associations has been rather led by the available methodologies, than by real problems and questions. What became clear by this encounter of quantitative techniques with archaeological

reality, is that first, statistics cannot be used as a panacea for problems of objectivity and explanation in archaeology, and second, that the nature of the archaeological record itself puts constraints on the degree of quantitative techniques that can be used at a particular site and period.

Without renouncing the use of quantitative methods for certain types of data, or certain stages of analysis, the present thesis lies rather in the field of the 'preliminary stage of data inspection': investigating the nature of the available information related to the use of space, in Neolithic Eastern Mediterranean.

2.2.2 The need for ethnoarchaeological research in spatial studies

Ethnoarchaeological research came as a result of the dissatisfaction with quantitative methods, and the realisation that the complexity of the way in which archaeological record is formed, had been rather underestimated so far. One of the more explicit expressions of this dissatisfaction was made at the concluding paper of Hietala's book, which though solely devoted to a review of statistical methods, in its introductory section made clear that :

> "With respect to spatial analysis, one of the responses to dissatisfaction with currently available methods and results has been a growing interest and activity in ethnoarchaeology." (Whallon 1984:243)

Furthermore, ethnoarchaeology came as an aid to other important problems for archaeology as for example that of inference and analogy, issues inevitably related to any kind of archaeological interpretation. In the first stages of archaeological history, researchers used ethnographic material as a point of reference for the majority of their explanatory models. In the period of processualism, however, with the new developments in methodological techniques and the analytical study of the nature of the archaeological record, this kind of reasoning, seemed rather unacceptable and in need of refinement.

As a result ethnoarchaeology was introduced, defined as 'ethnography from an archaeological perspective' (Stile 1977: 89), and having as its main purpose a more careful use of ethnographic material, in order to create a common line of communication with archaeology and help the interpretation and explanation of archaeological data.

Despite the optimistic aims and the promising tasks, there still seems to be today a confusion about the specific role of ethnoarchaeology in archaeological enquiry as well as a dissatisfaction about its achievements. Some of the main issues of criticism are: i) its failure to construct an archaeologically comprehensible 'language', and ii) its inability, at an explanatory level, to offer anything else but 'cautionary tales'. In the last decades there is a great interest in attempting to evaluate and redefine the subject matter of ethnoarchaeology (Kent 1987, Gamble 1991, Stark 1996), giving more emphasis on the formulation of explanatory models, that would operate at a higher level than that of mere analogy and would be available for testing by archaeological evidence (Kent 1987:42).

The following analysis is divided into two sections: in the first we examine the degree up to which ethnographic analogy could help spatial studies and archaeological interpretations, while in the second, there is a more specific reference on the objectives, achievements and current problems of ethnoarchaeological research.

i) Spatial studies-ethnographic analogy and the problem of inference in archaeology

Archaeology, right from the beginning of its history as a separate discipline, used ethnographic analogies for its interpretations. The influence of American archaeology and its links to ethnography has always been the prime force towards this direction and the comparative use of archaeological and ethnographic data is usually taken for granted by American archaeologists even in their most recent studies:

> "Only by comparing the prehistoric patterns with ethnographically or ethnohistorically known systems (or series of systems) can the archaeologist begin to place the settlement data in fuller environmental and cultural context and to raise significant theoretical questions as to origins, continouities, transformations, and determinants" (Vogt 1983:8)

The methods of comparison that American ethnologists and social anthropologists use in order to study settlement patterns can be divided into three types: 'culture area', cross-cultural type' and 'controlled comparisons' (Vogt 1983:8). From the archaeological point of view, these could be translated into: 'specific historical analogy', 'general comparative analogy' and 'specific comparative analogy' (Willey 1977), and they constitute what archaeologists usually refer to as ethnographic analogy (Stiles 1977, Kent 1987).

In the following section, we will describe briefly the objectives and the subject matter of each of the above comparative types, as well as the problems they generate, in order to indicate the constraints that ethnographic approach poses for the interpretation of archaeological data.

'The direct historical approach' (Steward 1942, Ascher 1961, Peterson 1971, Gould 1974) refers to archaeological and ethnographic cultures for which there is a connection in time and / or space. It has been used in abundance especially with regard to American prehistory (Deetz 1965, Longrance 1968, Sanders, Persons and Santley 1979) where the nature of the record allows this kind of connections, and it is generally considered 'to provide the highest probability of being correct because the conditions of time, space, and cultural affinity of the groups who produced the two sets of compared data are most analogous' (Stile 1977:95). Some of the disadvantages of this approach are: i) the fact that as long as it is constructed on the basis of geographic closeness, the environmental factors might be overemphasised in the analysis of determinants and ii) the fact that it is not very flexible and capable of handling patterns which were introduced from elsewhere or were products of migration (Vogt 1983:9).

'The general comparative analogy' (Stiles 1977, Peterson 1971, Gould 1974, Yellen 1977), or cross-cultural analysis, as is also called, refers to samples of cultural types or of ecological settings from at least two countries (see also chapter III). An example of this approach has been attempted by John Whiting (1964) and George Murdock (1967), who conducted a large and systematically drawn sample, called Ethnographic Atlas, and based on ethnographic material attempted to create a cross-cultural ethnographic database for the formulation of hypothesis and for different kinds of ethnographic research. The main criticism of this approach has been: i) its inability to define proper boundaries for its cultural sample and ii) its attempt to compare properties of systems that have been taken out of their cultural context (Vogt 1983:11).

Finally, the 'method of controlled comparison' (Eggan 1950, 1954, 1980), constitutes an attempt to combine the advantages of both the above approaches and provides 'as much control as possible over the ecological and historical factors'.

Even if one ignores the theoretical and methodological problems that emerge from the definition of the above approaches, one has to admit that the application of these methods to archaeological reality has not always been very successful. The case of American archaeology does constitute an exception, because it deals with the most favourable conditions, both from the point of preservation and abundance of material but also from the point of the 'safety' of historical analogies, as long as the time span between prehistoric and historic societies is usually rather narrow.

Confronted with these kind of methodological problems and at the same time recognising the value that a broader comparative analysis could have for their field, archaeologists turned to alternative approaches: i) by creating a new field (ethnoarchaeology) that would examine the ethnographic record from an archaeological perspective and ii) by using cross-cultural studies in order to 'identify relationships between behavioural characteristics' (Whitelaw 1989:27, Gamble 1991:5).

However, apart from the methodological issues, one has also to refer to the important theoretical debate related to the particular subject, which is the degree up to which archaeologists are justified in using ethnographic analogy for their interpretations.

Archaeology, due to the nature of its record, quite often relies for its reconstructions, understandings or statements about the past, upon the idea of analogy, according to which if things have *some* similar attributes they will also have *other* similar attributes (Mason 1972:871). Despite the fact that this concept of analogy had a long history in archaeology, through the influence of ethnography and the comparisons with the ethnographic record (see above), it is during the most recent years that the issue became the centre of a theoretical debate, and researchers started disputing the degree to which the use of analogy could actually justify the validity of archaeological interpretations (Gould & Watson 1982, Wylie 1982).

As it has been already shown (chapter I), during the processual period, attention was drawn, to the way that the archaeological record is formed and to the fact that what archaeologists actually

reveal are the 'static facts' of a series of dynamic processes. The result of that debate was the realisation that any attempt to understand and reconstruct the past would involve: i) a need to identify the processes which form the record and ii) a need to link contemporary observations with statements about the past.

In the most recent years (Kent 1987, Whitelaw 1989) clear distinction is made between these two stages of inference: one that refers to the identification of patterns and could be tackled through analogy (this being: ethnographic analogy, ethnoarchaeology or experimental archaeology) and another that lies heavily upon, what is usually called, the 'uniformitarian assumption', according to which 'processes in the past were not qualitatively different than those we observe today' (Kent 1987:43, Whitelaw 1989:11), and has as its ultimate task the formulation and testing of models and theories.

While the cautionary use of analogy is today rather broadly accepted, at least for identifications and functional studies (Kent 1987, Wylie 1985, Whitelaw 1989), the idea of uniformitarianism still causes a great deal of controversy among researchers. Susan Kent (1987:41-43) ascribes to uniformitarianism the validity of a general law and claims that it provides the general basis for all archaeological interpretations and understandings. Whitelaw (1989:12) recognises the existence of a 'uniformitarian status' only for the natural processes (erosion, decay etc.) which form the archaeological record, while, Gould (1978:250-251) disputing even the role of analogies at the first particularistic level of identifications, points to the danger of applying laws in social sciences where human decisions and alternative behaviours usually play the most important role.

It is true, that by ascribing to uniformitarianism an abstract level of nonparticularistic information, 'such as that obtained for explanations and understandings' (Kent 1987:41), with the aim of developing models and methods for the delineation and explanation of patterns and their interrelationships, Kent avoids the problem of inappropriate usage of analogy and identifications. However, though the distinction between a level of particularistic identifications (ethnographic analogy), and a level of abstraction (uniformitarianism, models and theory) is realistic from a theoretical or even ethnographic point of view, in archaeological reality it is not. As the present thesis will testify, the problem of identification is always present for archaeology, and it is rather impossible for researchers, to refer or attempt to test any kind of model or interpretation at any level of abstraction, without having to be confronted initially with this particular issue.

ii) The emergence of ethnoarchaeology: objectives and current problems

Partly because of the dissatisfaction with previous methods, and partly because of the complexity of the archaeological record and the confusion that the inappropriate use of ethnographic analogy caused to archaeology, in the beginning of the 70s a new field came to light, that of

ethnoarchaeology. Initially, its prime task was to conduct ethnographic research in a way that would be more helpful to archaeology, paying emphasis on material behaviour and those elements that were also recoverable and comparable to the archaeological record (Binford 1978, Gould 1978, 1980, Hodder 1978, Kramer 1979).

Gradually however, the innumerable number of studies that were conducted under the label 'ethnoarchaeological' seem to have caused confusion to the understanding of the term, and lately there has been an attempt by researchers to redefine the objectives of the field and re-evaluate its methods (Kent 1987, Gamble & Boismier 1991). According to S. Kent, all the studies which are relevant to ethnography can be distinguished into three main types: anthropological archaeology, archaeologically oriented ethnography (or archaeological ethnography), and ethnoarchaeology (Kent 1987:34).

The first type (anthropological archaeology) already discussed in the previous section, is the oldest of all, depends upon direct or general ethnographic analogy, and aims to cultural historical narratives.

The second (archaeological ethnography) uses ethnographic material as analogs, in order to help the identification of archaeological descriptions, and therefore depends upon ethnographic analogy in a more limited and specific way (Stark 1996:99). The range of studies in this particular field varies, from studies about processes of deposition that could potentially effect the formation of the archaeological record (Ascher, 1962, 1968, Crader 1974, Hayden and Canon 1983), to studies about symbolism especially with reference to ceramics, their manufacture, design and disposal (Foster 1960, De Boer and Lathrap 1979, Hodder 1982, Longrance 1981), studies about floor areas and settlement size (Naroll 1962, Wilk 1983), or even experimental studies about object manufacture and use and the effects of natural processes on the archaeological record (Coles 1973, Carneiro 1979, Kent 1981).

However, despite the important contribution that these studies have on archaeological enquires, it is usually recognised that they are unlikely to be able to offer anything else but cautionary tales for archaeologists, because they mainly operate at a very limited and particularistic level. Furthermore, as has been already shown, analogy cannot provide explanatory models on its own, without a broader level of analysis and the backup of a theory.

This need for a field that would operate at a broader level of explanation and understandings, was to be covered by ethnoarchaeology, as defined by Kent, which had as its main goal 'to formulate and test archaeologically oriented and/or derived methods, hypotheses, models, and theories with ethnographic data' (Kent 1987:37). However, despite the considerable number of studies (Binford 1978b, Cannon 1983, Gould 1968, 1974, 1978a, 1978b, 1980, Hodder, 1983, Kent 1984, Longacre 1974, Yellen 1977), which have been conducted with this aim, very few seem to have achieved their goal (Kent 1987, Gamble 1991).

The reasons for this failure are two: one of definition and another of methodology. For the first one responsible is 'the mistaken belief that ethnoarchaeology is anything more than a technique' (Kent 1987:38). It is very important for archaeologists to understand that though ethnoarchaeology operates at a broader non-particularistic level of information, it does not *explain* the archaeological patterns. As Stark recently put it, ethnoarchaeology is a research strategy that provides 'descriptions rather than explanations of human behaviour'. Constituting a more specialised way of acquiring and testing data, ethnoarchaeology's main role is to indicate significant units of behaviour which within a theoretical context, could provide powerful tools for the understanding of the past. Therefore, 'without theory, ethnoarchaeology is merely description at best and in most cases differs little from the more descriptive and less interpretative studies of archaeological ethnographies' (Kent 1987:38).

The second reason refers to a methodological issue that derives from the way in which ethnoarchaeology has been conducted so far, and is the problem of the application of anthropological models on the archaeological record. Susan Kent has indicated the problem quite explicitly:

> "Ideally, one starts with archaeological research interests, goes to ethnographic data for formulation and/or testing of hypotheses, models, and /or theories about these interests, and then returns to the archaeological record to implement the understanding gained from the ethnographic data. *In actual practice, however, it is much more common to stop at the application of the ethnographic data stage.*" (Kent 1987:37; emphasis added).

Whether this is the result of a confusion among researchers on whose job it is to test the applicability of archaeological models or derives from a more serious issue of the difficulty that archaeologists still face in following the ethnoarchaeological 'vocabulary', it is obvious that only when such attempts start emerging, a real beneficial dialogue between the two fields can be achieved.

2. 3 Anthropological models vs. archaeological applications

Since the 1960s the idea and utility of models has been very popular in archaeology. It was introduced as part of the new, scientific vocabulary of processualism and it was thought to facilitate and validate archaeological methods of interpretation. Spatial studies, being one of the main themes of new archaeology, were particularly influenced by these kind of tendencies. In the beginning, they focused mainly on geographical paradigms concentrating on the study of spatial patterning in artefact, feature, structure and site distributions. Later, however, with the introduction of ethnoarchaeology, a greater interest was developed for anthropological models which were expected to be able to link the patterning and variability in archaeological record with the social structures related to them.

The present thesis does get involved, although partly, into this debate between anthropological models and archaeological applications, by testing the applicability of suggested

models against material from Eastern Mediterranean. In particular it examines against *which* record anthropological models concerning the use of space, are called upon to be tested.

Before we set out the main parameters and objectives of the thesis, it would be quite useful to examine in some detail the role that anthropological models were called to play in archaeological investigations in general, as well as the difficulties that researchers face in their attempts to test them. In the following section discussion focuses on two mainly issues: i) models at a theoretical level: their definition, purpose and weaknesses, and ii) examples of anthropological models which are particularly related to the identification of the way domestic space is used.

2. 3. 1 Models and their purpose

Models were introduced by the theoreticians of new archaeology (Clarke 1968, 1972) as a useful methodological tool that could assist archaeologists in their attempt to formulate and test hypotheses.

According to Clarke's definition: 'Models are pieces of machinery that relate observations to theoretical ideas' (Clarke 1972:1-2). More specifically they could be described as 'idealised representations of observations' which simplify and specify a particular field of interest and 'offer a partially accurate predictive framework'. In general, models serve as heuristic devices for manipulating observations and hypotheses; they may also act as visualising devices, comparative devices, organisational devices, explanatory devices or devices for the construction and development of theory (Clarke 1972: 2, see also Harvey 1969:141).

Central to the concept of model are its links to theory and analogy, two relationships that justify the archaeological concern on the subject. "The existence of a model presupposes the existence of an underlying theory, since a model is but one simplified, formalised and skeletal expression of a theory - be it tacit or explicit - developed for a particular situation" (Clarke 1972:3). Furthermore the relation between the model and the observations modelled is considered to be one of analogy, in the sense that the researcher has to use similarity or dissimilarity between two or more 'things' (analogues) in order to construct an explanation or hypotheses (Clarke 1972:2, Mason 1972:872, Kuhn 1977:297).

In his discussion about models, Clarke (1972:5) divides them into two main categories: controlling and operational. With the first one he refers to the general 'cognitive or controlling mind models', which are the result of the educational processes and the changing contemporary systems of beliefs to which the researcher is exposed. These can take the form of prevailing paradigms ('exemplary groups of experiments') which at any one time can represent best the level of enquiry that a discipline has reached. Examples of these paradigms that seem to have dominated archaeology for the last decades are: i) the morphological paradigm which mainly focuses on the study of artefacts and assemblage systems, ii) the anthropological, which is based on ethnological controlled experiments, and attempts to identify patterns in the archaeological record, iii) the ecological, which

sees archaeological sites as adaptive to the environment mechanisms, and iv) the geographical which focuses on the spatial manifestations of activity patterns within and between sites (Clarke 1972:6-7).

The second category (operational models) refers to a more practical side, that of the actual techniques and machinery which archaeologists consciously and deliberately use in order to reach a conclusion. "Operational models, then, are the experimental analogues or the hypotheses produced from them, which the archaeologist pushes against a sample of archaeological reality to test the goodness of fit between the two"(Clarke 1972: 10).

Clarke concludes that there are three main reasons that could justify the use of models in archaeology: a) they are inevitably and implicitly used by archaeologists if only in the form of subconscious mind models, b) they are economical because they allow the exchange of 'generalised information in a highly compressed form', and c) they can help to the discovery of fresh information and observation and to the formulation and testing of hypotheses (Clarke 1972: 3).

Regardless of whether this is a useful theoretical construction, or a simple 'translation' of the distinction between theory and methodology into the new processual vocabulary, one has to admit that especially with reference to more holistic problems such as the use of space, the existence of an explanatory anthropological model can be useful if only because it provides a theoretical framework and a certain line of enquiry.

However, as it is usually the case with such broad theoretical concepts, some of their advantages also constitute their main weaknesses. An example of these is the fact that models refer to selected aspects of observations, and therefore make necessary the demand for the application of more than one model of different aspects in any particular study. This is a case that should be kept seriously in mind of any researcher that rushes to explain and reconstruct a site based only on one model.

Furthermore apart from these theoretical problems, models face a much more severe criticism at a very practical level: that of application. As is now evident from the literature that refers to both theoretical (Courbin 1988, Gamble 1991) and methodological (Kent 1987, 1990) issues, there are very few anthropological models that have managed to pass the stage of mere description or 'archaeological ethnography', and even fewer the ones which have been tested against archaeological data.

The present thesis will tackle this problem from an archaeological perspective, in an attempt to investigate how sufficient the archaeological record from Neolithic Eastern Mediterranean is, in order to contribute to this most disputable issue of the applicability of anthropological models in archaeology.

2. 3. 2 Anthropological models and the identification of the use of domestic space: some examples

What follows is an account of two models that seem to bear some useful implications about the way in which the study of the use of space could be approached. Both models have been introduced to archaeology as potentially applicable examples, and they both approach the record from a cross-cultural perspective. The aim of the present section is to outline these models, to describe the theoretical framework in which they have been developed and to investigate the degree up to which they could be applied to archaeological evidence. What is of main interest here, is the degree to which the variables that these models suggest could be used and applied in archaeological terms and if so, the validity that such an analysis could provide to the suggested models. The aim therefore is the initiation of a dialectic between archaeological material and anthropological models, in which however, archaeology has to display first its *own* patterns for comparison, *before* it starts making sense out of them, through the help of the 'anthropological eyes'.

The first model was initially introduced in 1972 by Kent Flannery, in his article on "The origins of the village as a settlement type in Mesoamerica and the Near East: A comparative study". At this paper Flannery examined two types of societies in the ethnographic literature, and focused on the different archaeological plans that these were likely to leave behind. In the first type, societies operated as a group, which meant that responsibility or risk for subsistence was assumed not at the level of the individual or nuclear family, but at the level of the community as a whole. As a result, food storage in these societies was out in the open and it was shared by all occupants of the settlement. This kind of social structure, according to the ethnographic record, can produce two types of settlements patterns: a large structure that would house the entire group or a series of small houses in which the members of the group will be distributed. In the second type of society risk was assumed at the level of the individual or nuclear family, storage was private and the site plan was one in which there were 'either widely spaced household units or closed-in eating and storage areas' (Flannery 1993:110 -111).

After the formulation of his model Flannery made an attempt to test its applicability on the archaeological record of the Near East. He suggested that one could identify the first group in the structures of the Natufian/PPNA period and the second in the structures of PPNB. His main criterion for such an identification was the size of the structures and the information of the inventories of two houses of a particular site: Nahal Oren (Stekelis & Yizraely 1963), which seemed to support his arguments. Though he recognised the need for more detailed analysis and pointed to the inadequacy of many current publications to provide the detailed information usually needed, he suggested a methodological model for future research that he confidently believed, could solve many of the methodological problems:

> "(1) excavate each hut separately, piece-plotting all tools and keeping each hut's inventory separate; (2) use statistical measures of association to search for men's and women's tool kits; (3) search for associations between tool kits and variables such as hut size, presence/absence of hearths, presence/absence of mortars, etc.; (4) use multidimensional scaling to compare hut inventories; (5) use Q-mode and R-mode analyses to identify activity areas. My prediction: large

> huts will prove to have both men's and women's tool kits; some small huts with hearths will have only women's tool kits; some small huts without hearths will have only men's tools." (Flannery 1993:111)

With regard to the theoretical framework in which the model was developed, one could point that Flannery seems to accept cultural evolutionism, according to which cultural change is explained in terms of 'mutation' (biological evolution) and 'selective advantages' (Flannery 1993: 114). Based on this theoretical framework, it is made clear that the shift from one type of society to another does not need a particular 'cause' and it is the result of 'selective advantages'.

Judging the above model from a methodological point of view, it has to be stressed that Flannery, conducting an ethnographic analysis, takes many issues for granted and ignores serious problems of archaeological reality. Examples of this attitude, are: i) the optimism that archaeological inventories could be as rich and informative as the ethnographic ones, ii) the fact that erosion and disturbances are not considered to be a problem, iii) the need for the identification of contemporaneity among the structures which is not mentioned, iv) the identification of men's and women's tool kits which is presented as bearing no difficulties, and v) the use of statistical techniques which is introduced in a rather uncritical way.

These problems are also evident in the example that he gives from Nahal Oren, in order to support his arguments. The evidence according to which different structures were used for different purposes and by different sex groups is based on the information from a brief preliminary report on the site with no reference to stratigraphy and disturbances, while the identification of men's and women's tool kits is made on the assumption that certain tool types correlate with a specific gender. Moreover, indicative of the, sometimes unrealistic, positivism of processual era, is Flannery's conviction that with the use of statistical models one could be able to 'identify the number, sex, and age of the occupant(s) of each hut' (Flannery 1993:115).

With regard to the specific problem of identifying gender via tool types, one has to stress, that, though research seems to have made a breakthrough in the mortuary record (Molleson 1989), it is at least premature to ask from settlement archaeology to be engaged in the same task, if only because it lacks the relevant (skeletal) information.

The second model by Susan Kent (1984, 1990) seems to be closer to archaeological reality. It focuses mainly on the study of the use of domestic space from a cross-cultural perspective, while at the same time uses variables, which at least up to a degree, could be traced by archaeological research.

> "Specifically, the model to be tested states that the use of space (behaviour) and the built environment (cultural material) become more segmented or partitioned as a group's culture becomes more segmented or complex." (Kent 1990:129)

The model is conducted by comparing societies with different socio-political complexity (e.g. status stratification, hierarchies, specialisation, sex roles) and placing them within a 'continuum between

segmentation and unity or lack of segmentation' (Kent 1990:128). The sample used for the investigation of the above hypothesis originated from the ethnographic record. Kent examined seventy-three societies with different socio-political complexity, and compared the spatial and architectural segmentation that was present, mainly based on the presence or absence of partitions and the use or non-use of functionally, age- or gender-restricted loci, within domestic architecture. According to this analysis, and by dividing her sample into five categories of socio-political complexity, she was able to testify that 'as a society becomes more sociopolitically complex its culture, behaviour, or use of space, and cultural material or architecture become more segmented' (Kent 1990:127).

At this point, a reference is probably necessary to the general theoretical framework under which the particular model has been developed, in order to understand better its aims and reasoning.

Kent approaches culture and the study of the use of space from a structuralistic point of view:

"Cultural material, behaviour, and culture are seen as tangible representations of a highly abstract structure that is common to all *Homo Sapiens*" (Kent 1987a:520). According to this approach "everything we perceive is filtered through a common Homo Sapiens brain, which then classifies and categorises all data using language as a compartmentalising mechanism"(Kent 1987a:526). This mental process is also evident in the way that human societies operate:

> "... all human societies have some form of kinship, which is the placing of ego (or the individual, a part) in relation to a larger unit, a whole (nuclear family, kindred, clan, or the conception of a society; an entity made up of individuals forming a whole). Kinship -a manifestation of the structure or dialectic- can thus be viewed as taking a part and putting it within a whole. Culture is how the parts are integrated into wholes (e.g., through a bilateral or unilineal system); and it is this "how" that is infinitely variable." (Kent 1987a: 527-528)

The main premise of this view of structuralism is therefore that though the nature of the relationships and interrelationships among patterns differs between groups and changes through time, the basic structure that underlines these relationships does not. This latter structure is the basis for the segmentation - unity dichotomy and is the reason, one could add, that gives cross-cultural validity to the particular model.

Though closer to archaeological reality, this model still poses serious problems for archaeologists. Kent recognised some of the difficulties herself:

> "Determining which sex used a tool can only be done by inference from ethnographic and ethnoarchaeological data, and determining the specific function(s) for which a tool was used or the exact activities performed at a site may not always be possible." (Kent 1984:203)

Furthermore, it is quite clear from the beginning that the methodological approach she is using, based on qualitative rather than quantitative data, is much closer to anthropological practices rather than archaeological.

However it is still possible to examine some of the variables, such as absence and presence of partitions in architecture, or even types and functions of objects. As already mentioned, segmentation seems to be a variable that could be used cross-culturally, but one should keep in mind that it comprises just a working tool for the delineation of patterns and not a panacea and an explanation for everything. Used in that sense it could be very useful for an archaeology that wishes to pass on a new era and deal with more holistic problems.

Of course, as it happens with the majority of models in archaeology, still remains the problem of application, and this will be one of the issues that the present thesis will attempt to tackle. The question is therefore how sufficient is the archaeological record to deal with this kind of holistic issues and up to what degree it could test the particular model.

2. 4 Conclusions

The aims behind this quite broad theoretical analysis which proceeded, were three: i) to become familiar with the relevant developments in the field and how these came about, ii) to understand the achievements, and shortcomings of the methods that have been used so far and iii) to set a solid theoretical frame, which is necessary for a thesis that, dealing with the applicability of models on the archaeological record, is bound to be very 'practical'.

The methods used so far for the identification of spatial associations among artefacts, features and structures within and between settlements were based either on sophisticated quantitative techniques or on ethnoarchaeological studies. In both cases the results were rather limited and not applicable to all the types of archaeological evidence. Consequently, the role that archaeology can play in the investigation of relevant issues remains still rather unclear.

As it became evident from the previous review (chapters I and II), this 'deadlock' in spatial studies, reflects a wider problem of the way in which archaeological record has been approached by different theoretical schools in the last decades. In the beginning, the overoptimistic positivism of processual archaeology, along with the traditional links to geography and biology and the support of computers and statistics, led to the study of spatial organisation, settlement patterns and artefact distributions. Later, after the realisation of the different factors that effect the formation of the archaeological record (depositional, post-depositional processes), the interest shifted to ethnoarchaeological studies, and the examination of artefact frequencies and intrasite variability. Finally a post-processual approach on the subject, seemed to have taken for granted the identification of patterns, and moved on to questions of meaning and explanation (Stark 1996, Tschauner 1996).

Based on the above, the present analysis, follows two main lines of thought: a) the archaeological record constitutes the 'text' for any kind of archaeological 'reading' or interpretation, and as a result it should be approached as an 'entity', and b) for the particular case of the study of the use of domestic space, statistics and ethnography can be indeed very helpful, but they need to rely on a 'solid' basis of investigative data. The present thesis, attempts to do precisely that, and examines

the information which is available for the study of the identification of domestic space in Neolithic Eastern Mediterranean. In the following chapter there is an outline of the methodological steps undertaken for the purpose of this particular task.

CHAPTER III

DOMESTIC SPACE IN NEOLITHIC EASTERN MEDITERRANEAN: TOWARDS A SYNTHETIC APPROACH

> "We are likely to make more progress in expanding our understanding of the past if the development of methodology is pushed by the questions we wish to answer, rather than what is often, the current situation, where our questions are dictated (and limited) by the methodologies already at our disposal." (Whitelaw 1989:317)

3.1 Introduction

The present thesis attempts a synthetic approach towards the archaeological record by examining domestic space from a contextual and cross-cultural perspective. Based on suggested models about the relation between use of space and built environment (Kent 1990, Flannery 1972), the analysis focuses on structures and their furnishing in an attempt to investigate the way domestic space was used and divided in Neolithic Eastern Mediterranean.

In the previous chapters I discussed the way in which archaeological record has been approached by different schools of thought, and examined the methods used by current research in order to analyse spatial information. It became evident that, due to specific theoretical and methodological agendas, research on spatial issues has found difficulties in coping with the complexity of the archaeological record, and has limited itself into certain themes and periods (see chapter II). The aim of the present thesis is to stress the importance of contextual information prior to any attempt for statistical analysis or model testing. Such a process will highlight the potential and the limits of the archaeological record to deal with more synthetic issues and to be 'tested' against existing models and interpretations.

The following chapter outlines the reasoning behind the methodological approach adopted here and attempts to facilitate the understanding of the analytical chapters which follow.

The chapter is divided into four sections: i) a review of the methods that have been used so far, for the investigation of spatial variability in the particular area and period under examination, i.e. Neolithic East Mediterranean, ii) an outline of the main parameters that set the frame for the present research, iii) some issues regarding the nature of the archaeological record which are crucial for the study of synthetic subjects such as the use of domestic space, and iv) an outline of the methodological steps followed in the present thesis.

3.2 Domestic space in the Neolithic Eastern Mediterranean - Current Approaches

Before we proceed to a more detailed discussion of the methodology followed in the present research, it would be useful to refer to the work that has been done in the area with regard to spatial issues, and identify the current methodological trends. References for each particular site or area will be available in the chapters of analysis. Here however, I will attempt a more general review of the literature in order to place the proposed analysis into a broader methodological context.

Archaeological research in Neolithic Eastern Mediterranean has a special character with regard to spatial issues, which is dictated by the nature of the archaeological record itself. The complexity of archaeological deposits (multi-period sites) and their distance from any kind of historic or ethnohistoric record make the application of direct ethnographic analogies and statistics rather difficult. As a result, the majority of spatial studies in the area, rarely examines floor assemblages and artefact distributions, and instead it mainly concentrates on architectural elements (Banning and Byrd 1987, 1989) and the use of ethnoarchaeology for the identification of house types and room arrangements (Aurenche 1981, 1992a, Watson 1978). One of the few examples of ethnographic research which have concentrated on tool kits representative of various domestic activities, has been conducted away from the coastal area, in Iran (Kramer 1982, 1983, Watson 1979).

More specifically, spatial studies can be found in the literature under three forms: i) reports and articles about specific sites, ii) ethnoarchaeological research and general explanatory models, and iii) synthetic studies:

i) Reports and articles about specific sites:

Examples of this type constitute the majority of the available literature (see chapters IV and V). They can be divided into final or preliminary reports of excavation projects, and articles discussing certain aspects of the evidence from a particular site.

The attempt to extract from this material contextual information, or to place it into a wider context, cross-examining the validity of the patterns presented, usually faces significant problems, because all three types of information have different objectives and none is sufficient to serve the demands of a synthetic study: preliminary reports attempt to establish a temporal framework for the site under investigation and concentrate on the most diagnostic or identifiable features and objects found in it, final publications have to struggle with the difficult task of presenting *all* the information recovered in the process of the excavation of a site, and articles, usually concentrate on very specific themes. Even in the case, where a spatial issue becomes the focus of a particular article (Byrd 1994, Kotsakis 1994, Özdogan[1], A. 1995), the space available is so limited, that no access to the primary evidence can be provided and any attempt to verify or compare suggested patterns is therefore

[1] The correct spelling of some of the Turkish names was not possible due to the limits of the software used and the absence of the specific fonts.

unattainable. As a result, detailed contextual information is lost somewhere in the middle between very *selective* and very *general* statements about past societies.

ii) Ethnoarchaeological research and general explanatory models:

As already mentioned ethnoarchaeological research in the area has mainly focused on the formulation of hypotheses about ancient behaviour (Watson 1979, Kramer 1982), and the development of general principles concerning construction techniques, room arrangements and the location of activity areas in domestic architecture (Aurenche 1981, 1992a, 1992b, Watson 1978). Despite the importance of this kind of studies for the understanding of archaeological material and the functioning of traditional and maybe ancient dwellings, one has to note that they approach the archaeological record from a *general* perspective, seeking to identify and apply *general* rules about architecture and the use of space. Archaeological record however, differs remarkably from ethnographic material, represents 'compressed time' (Smith 1992) and probably needs to be submitted into a 'refinement process' before engaging into a dialogue with ethnoarchaeology. One of the aims of the present thesis is to underline precisely this necessity for archaeology to reassess and produce its *own* spatial patterns in order to participate in this dialogue with ethnoarchaeology in a more dynamic and meaningful way.

The same applies for the explanatory models. So far there is either no application of these models in archaeological terms (see above; also Kent 1987b: 37), or their applicability is usually 'presumed' against a 'vague' or 'ideal' archaeological reality (as in the case of Kent Flannery's model of 1972; see above, and Flannery 1972, 1993).

iii) Synthetic studies:

These are studies which attempt a more synthetic review of architectural forms in the area (Banning and Byrd 1987, 1989, Aurenche and Calley 1988), or other more organised attempts to accumulate and present the material from the whole area of the Near East in a systematic and homogenous way (Hours *et al.* 1995 : ASPRO; Gebel 1984: TAVO). In the first case, emphasis is given mainly on structural elements, in a discussion about the built environment and the social structure of a particular region. In the second case however, the effort goes beyond archaeological reconstructions, and addresses other equally fundamental issues for archaeological reality, as it aims to facilitate access to the material and consultation for future research (Hours *et al.* 1994: 6-8).

Finally, special reference should be given to the most recently published book on *Houses and Furnishings in Bronze Age Palestine*, by M. Daviau (1993), which despite its focus on a different period, addresses similar to the present thesis issues, pointing to the inadequacies of the methods used so far, and stressing the necessity to examine 'artefacts in their quantitative and locational relation to architectural components' (Daviau 1993 :25-27) and to view the archaeological record in a more holistic way. Furthermore, it is important to note, that the realisation of the close relationship between stratigraphy and spatial associations, has led Daviau into similar to the present research

paths, into an evaluation of the nature of the archaeological record, and a reassessment of archaeological practice and publications.

It seems therefore, that in methodological terms, research has limited itself so far into architectural comparisons, has not managed to overcome the traditional links with ethnography, and in general has failed to address the issue of the importance of spatial associations in the region, in a more comprehensive and holistic way.

The present thesis underlines the importance of a more detailed (contextual) and at the same time cross-cultural approach to the record, not as a panacea but rather as a supplement to current approaches. The reason for such an attempt is quite clear: a detailed analysis, would indicate the limits and the potential of the archaeological record to deal with more synthetic subjects, while a cross-cultural view-point would make it easier to distinguish between problems which depend on the nature of the archaeological record and others which are the result of archaeological practices. In this way the real size of the problems related to spatial studies will become evident, and it would be possible to obtain a clearer idea about the route that research should take in the future.

3.3 Towards a synthetic approach

In 1993 Andrew Sherratt described archaeology as:

> " ... a set of isolated discursive communities deployed over a tiny fraction of their potential evidence." [Sherratt 1993:125]

Regardless of whether such a statement might sound pessimistic or not, it is true that archaeology quite often limits itself into specific, isolated subjects and 'specialisms' (see chapter II). Though regionalism is, in a sense, linked to the nature of the archaeological record, and the need for detailed analysis at a regional and temporal level is indisputable, current research seems to develop an interest in testing the validity of archaeological methods at a broader level (Yoffee & Sherratt 1993).

Working towards this direction, I will attempt a more 'pragmatic' approach to the theoretical debate about spatial information, which is eventually a debate about the limitations and the potential of the archaeological record and of archaeology in general. I will argue that in order to provide a more comprehensive perspective for both the archaeological record and spatial issues one would need to undertake a contextual and at the same time cross-cultural analysis.

Due to the fact that each of the two approaches (contextual and cross-cultural) has been used in archaeology by different theoretical schools, it is usually assumed that they contradict each other. However, a more careful analysis would show that they are actually supplementary to each other.

The following research is defined by several parameters: it is both cross-cultural and contextual, it uses structures and their furnishing as a unit of comparison, it is based on published material, it examines the archaeological evidence from four areas in Eastern Mediterranean (Cyprus, Levant, Anatolia and Greece), and it focuses on Neolithic period.

- **'Cross-cultural' analysis**

Cross-cultural studies were developed mainly by American anthropologists, aiming to the gathering and study of large amounts of data (McNett 1979:39). Their purpose was either to study a number of cultures within a region, in order to indicate similarities and differences (comparative method: commonly used in archaeology), or to examine a wider sample (Hologeistic or whole world method), in an attempt to explain some general characteristics of human existence. As defined by Naroll (Naroll *et al.* 1974):

> "The method measures theoretical variables in a large, worldwide sample of human cultures and examines statistical correlations among those variables to determine whether the intervariable relationships are as predicted by the theory."

Depending on the units that are used for analysis, hologeistic approach can take four different forms, (Naroll and Naroll 1973): holohistorical, holonational, holocultural (using ethnographic cultures), and holoarchaeological. Despite their potential for the validation of archaeological propositions, very few holoarchaeological studies have been attempted so far. Archaeologists, disappointed by the fragmentary nature of their record, usually turn to ethnographic studies (holocultural) in order to borrow models suitable for their testings.

The cross-cultural analysis that was undertaken by researchers at Yale University in the 1940s, constituted one of the most influential works for American archaeology at that time, and its impact became evident in Julian Stweard's work (see chapter I). During the same period, anthropological research had developed an interest in functional relationships within specific cultures. George Peter Murdock, beginning in 1953, created the Human Relations Area Files (HRAF) which was a large corpus of ethnographic reports based on codified data. Some years later (Murdock 1957) he developed the World Ethnographic Sample which consisted of tabular coded files and was more suitable for computer processing. This programme in its updated version as the Ethnographic Atlas (Murdock 1967), has been also broadly used by archaeologists (Binford 1971, Kent 1990).

Murdock, in his attempt to use a scientific method for his approach, followed the same philosophers of science that processualists were to follow some decades later in archaeology. His methodological procedure had all the characteristics of a research from a positivist era: i) collection of data from a worldwide sample of cultures, ii) test of associations with various statistical measures (McNett 1979:43) and iii) prediction of relationships between social structure variables, based on theoretical models.

Two points related to the issue of cross-cultural studies are of importance to the present research, and they both have to do with methodological procedures and the concept of culture.

The first, is related to statistical techniques and sampling. One of the most important requirements in any statistical procedure is the 'randomness' of the sample, according to which all

items have the equal probability of being included in a sample. This is a very difficult issue for disciplines which study human cultures, because cultural boundaries are not easy to define. Nevertheless, ethnographers managed to solve somehow the problem by selecting for their sample cultures that "speak mutually unintelligible languages", or by "randomly sampling the space that cultures occupy" (McNett 1979:47).

Archaeology on the other hand, although having less difficulty to define its cultures, as they mainly constitute 'material culture', and are therefore easier to distinguish, it is more limited in a practical sense, because the sampling universe from which the researcher has to select its items is created by archaeologists themselves, and it depends on a number of factors, such as preservation, availability of material, research design, individual interest of the archaeologist, institutions and governments which provide the funding for archaeological projects etc.

Comparativists (Otterbein 1976) are quite aware of these problems, and they usually recognise to the researcher the right to determine himself/herself the sampling procedures and to set his/her own criteria for the adequacy of data (see also McNett 1979:50). Furthermore, the introduction of data quality control factors (Naroll 1962), the definition of variables in an ordinal (ranked) form and the pre-testing of their relevance (which is usually accomplished in archaeology by comparison to ethnographic models), are all methodological 'tools' that could help the archaeologist to evaluate his/her record and avoid systemic errors (see below).

The second point, is related to what used to be called the "functionalist argument", according to which culture is a unique, functional whole and therefore cultures are in no way comparable to each other (McNett 1979:46). As already mentioned, this is the same argument that some decades later was brought into archaeology by post-processualists (chapter I). Ember in 1964 gave an end to this dispute, by explaining in the most clear way, the special nature of cross-cultural approach:

> "In cross-cultural research, we are not interested in global comparisons of cultures as was the old "comparative method". Rather we are concerned with examining relationships between specific variables - e.g., degree of economic and degree of political development - in a sample of societies. The definition of a sample unit [or a trait] depends solely upon the purpose of the study. To put the issue simply, if our intent is to examine the relationship between volume and weight in "fruit", it does not matter one whit that we are dealing with "apples" and "pears" or even "watermelons." (Ember 1964:296)

The subject-matter of the present thesis could be a good example for the above argument. The study of the use of domestic space at a cross-cultural level, is seeking to understand the behaviour of each culture towards its built environment. Rather than attempting to homogenise cultures therefore, it underlines the 'specificity' of each archaeological case (see also Ucko 1995:21). Furthermore, it is important to realise that the role of a cross-cultural analysis is primarily to examine a general characteristic of human existence (in this particular case the way that space is conceptualised, used

and divided by different cultures) rather than to explain it. After having identified behavioural patterns one has to look back into the specific cultural characteristics (economic and social relations) in order to seek the reasons that gave to behaviour its particular form.

It is therefore clear, that cross-cultural approach, in order to be used by archaeology in a fruitful way, will have to adjust into the specific attributes that characterise the discipline, and find new ways of coping with its fragmentary nature. Cross-cultural approach cannot be considered an explanatory model itself. It is rather a methodological tool that allows the manipulation of large amounts of data, and setting them in a broader regional and temporal whole, gives the opportunity for the uniqueness of each culture to become more obvious.

From a distinctively archaeological perspective, and deriving from a completely different tradition, attempts have been made in Europe for the compilation of large databases which would facilitate the study of synthetic issues (Gebel 1984, Hours *et al.* 1994). Although lacking the theoretical background which was brought to cross-cultural studies by American anthropologists, these attempts have been proved very fruitful for archaeological practice and have contributed significantly to the creation of a different reality for archaeology which has made archaeological material more accessible and less fragmented.

These latest attempts, especially with regard to the French School (Hours *et al.* 1994), follow a long tradition of efforts for the standardisation of archaeological information, and started initially from 'purely' archaeological concerns about the validity and purpose of typologies (Gardin 1958, 1967, 1980, 1992, Gallay 1989).

In conclusion, one should stress once more, that the need for a more synthetic approach in archaeology, should not be considered a panacea for all the problems in the archaeological record, and should not be regarded as a replacement of any other kind of detailed analysis at a local level. As Sherratt (1993:128) put it : "The relevance of one observation to another has to be established via a network of local understandings". That is why, it would be important for any kind of synthetic work to consider *both* cross-cultural correlations and contextual attributes (local understandings).

- **Contextual vs. cross-cultural approach**

When Hodder in the beginning of 80s emphasised the importance of context for archaeology, he did it in order to highlight the importance of meaning and interpretation.

> "the context of an archaeological attribute is *the totality of the relevant environment*, where 'relevant' refers to a significant relationship to the object - that is, a relationship necessary for discerning the object's meaning" (Hodder 1986:143) (original emphasis).

With this definition he made clear that context is "object-centred and situation specific", where the object of enquiry might be "an attribute, artefact, type, culture or whatever", while the contextual meaning might vary according to the specific location of the object, the dimensions of variation under consideration and the questions asked.

Although in the present thesis I will mainly discuss the physical/stratigraphic context, which Hodder takes for granted, there are two elements from the above definition that are directly related to the following analysis: a) the fact that there is no distinction between pattern recognition and meaning, and b) the extent in which one can generalise about unique cultural contexts.

a) According to post-processualists, "to note a pattern is simultaneously to give it meaning (Hodder 1986:141). As a result it seems very difficult for archaeologists to break the contextual /hermeneutic circle (see chapter I) according to which "everything only has meaning in relation to everything else', and define a starting point for their research. Hodder recognised the problem, and suggested that in order to deal with it, "it is important to know *all* the data as thoroughly as possible and gradually to accommodate theory and data by trial -and -error searching for relevant dimensions of variation, cross-checking with contextual information, and so on" (Hodder 1986:145).

However, despite the claims for the importance of all the data, what one actually sees in the history of archaeology is a compartmentalisation of the record (chapter I) and such attempts as the one described above, are far from been an archaeological reality yet (and maybe reasonably). One of the main aims of the present research is to do precisely that and attempt to 'put the archaeological finds back to their place'. Although one recognises that this is a very difficult task and sometimes information is just not available, the fact that contextual information is at the root of most of our reconstructions and interpretations, is enough to make the effort worthwhile. This, as will become evident from the following section and even more from the analysis, is rather a big challenge for archaeology, and constitutes one of its greatest problems.

b) According to post-processualists, the aim of archaeology is not to provide generalisations but to understand each cultural context in its own right, "as a unique set of cultural depositions and practices" (Hodder 1986:6). Reacting to the law-like generalisations that processualists attempted based on cross-cultural studies, Hodder insisted that one cannot generalise from one culture to another. Furthermore, he stated that "the boundaries around a group of similarities (such as a cultural unit) do not form the boundaries of the context", and that "the boundaries of the context only occur when a lack of similarities and differences occurs" (Hodder 1986:143) According to this definition, although one can use the concept of culture as a methodological 'tool', [s]he must be aware that there might be types of contextual attributes that exceed the conventional cultural boundaries.

If this is the case, then cross-cultural approach would seem ideal for testing this kind of occurrences. Furthermore, if the aim of contextual archaeology is to understand "any detail such as an object or word in terms of the whole, and the whole in terms of the detail" (Hodder 1986:150), then cross-cultural approach is by definition 'contextual', because it puts information in a broader regional and temporal whole. Relevant at this point is Braudel's model of hierarchical temporal rhythms, according to which, rather than insisting on 'the existence of two fundamentally different levels of time' (ethnographic and archaeological, or in this case contextual and cross-cultural), one

should recognise the existence of multiple temporal scales (Smith 1992:27). Finally, one has to make clear, that cross-cultural analysis does not necessarily aim to law-like generalisations, as more and more comparativists now accept that the correlations obtained from cross-cultural testing do not always have a worldwide applicability (McNett 1979:53).

Having therefore made clear that both cross-cultural and contextual analyses can be considered supplementary to each other, one could claim that a study about spatial variability and the use of domestic space would gain more, if it was based on both approaches, as it would be able to provide insights about the uniqueness or not of spatial behaviour in different cultures.

- **Microscale analysis**

Having demonstrated the advantages for a cross-cultural and contextual approach to the record, I will now define the unit of comparison which is used in the present thesis for the study of domestic space and the way this was divided and used by the inhabitants of the Neolithic settlements in east Mediterranean.

The term 'domestic' is commonly used in archaeology, and for this reason it can be sometimes confusing. Here I use it in relation to a most recent definition, of a 'built, bounded conceptually or physically environment' through habitual use, as opposed to the undifferentiated, continuous, natural environment (Kent 1991: 438; see also Wilson 1988, Hodder 1990). Unlike later periods, dichotomies such as 'private' and 'public', 'domestic' and 'sacred' are rather unclear in Neolithic period, and as a result, the use of a less broad definition would be rather unsuitable here.[ii]

The present research focuses mainly on microscale analysis, namely structures and their contents (see also chapter II). Although it is recognised that the 'domesticated environment' might exceed the physical boundaries of a settlement or structure, structures are used here as a starting point for the understanding of settlements and as the most suitable unit for cross-cultural comparisons. The main focus therefore is on floors (occupation layers within structures) and their associated features and finds. The analysis varies in character according to the available evidence, and it might be detailed (chapter IV) or more general (chapter V). Information about activities and features outside the structures is also included in the discussion, but only at a general level.

Microscale analysis is often related to the concept of 'household' which derives mainly from anthropological and ethnographic studies (Blanton 1993, Netting *et al.* 1984). By this term researchers usually refer to 'a unit of economic and social co-operation' (Wilk and Rathje 1982:620), 'a group of people co-residing in a dwelling or residential compound, and who, to some degree, share householding activities and decision making' (Blanton 1993:5). In anthropological studies the concept of household evolved around kinship terminologies and composition, social structural arrangements, social relations of production, residence, domestic symbols, marriage practices etc., and has concentrated mainly on agrarian societies (Blanton 1993, Smith 1992).

[ii] see also Tringham 1991:125, Spector 1991:403 for a discussion about the 'values' ascribed on these dichotomies.

American archaeologists, especially those working in Mesoamerica during the 70s and 80s (Wilk and Rathje 1982, Wilk and Ashmore 1988, Flannery and Winter 1976) soon realised the advantages of such an approach for archaeology, both in theoretical and methodological terms and contributing to the debate, they stressed the importance of functional attributes for the study of households. Based on their archaeological experience, they suggested that it was more important, and probably feasible, for archaeology to seek to understand what a household *does* than what its social form *is* (Netting *et al.* 1984, Wilk and Rathje 1982), and they put emphasis on the main functional activities performed in a household: production, distribution, transmission and reproduction.

These developments however, passed unnoticed in mainstream archaeology, which as already shown (chapter II), apart from some interest in artefact distributions, paid little attention to the study of structures as 'separate' and 'complete' units. Recently, post-processual and feminist archaeology, with their claim for a less 'faceless and genderless' discipline (Tringham 1991, Hodder 1992) have emphasised the important role that microscale analysis can play in archaeology and have stressed the need for archaeological research to move towards this direction. Furthermore, one has to note, that exclusively archaeological studies in the field are rare and emphasis is usually put on the level of settlements (intrasite analysis) rather than individual structures (Stanley -Price 1979, Peltenburg 1985, Byrd 1994, but see Tringham 1991, Watkins 1990). As a result, the majority of studies about households is still based on ethnographic or historic material (Moore 1986, Spector 1991, Kent 1990, 1995, Daviau 1993).

It remains now to see, which are those points from household studies that can be proved beneficial for archaeology, and which are the obstacles that research faces in relation to microscale analysis.

As with the majority of ethnoarchaeological research, household archaeology has mainly to offer a long list of cautionary tales: the danger of linking architectural units with specific social units (Tringham 1991:100), the role of certain types of material (such as settlement residue) in spatial patterning (Moore 1982, Hodder 1987, Kent 1981), the significance of sampling in the identification of patterns (Kent 1987b:8-25), the importance of the association of features rather than their presence or absence (David 1971:124), etc. Apart from these however, microscale analysis brings archaeology closer to its own record, and highlights elements of its nature that might have been overlooked: it provides for example the right scale for the study of abandonment processes, it presents all different temporal rhythms reflected in the archaeological record (Smith 1992), and finally it reminds us that social relations at 'domestic' scale, constitute the basis of social relations at the larger scales, of villages and regions.

Despite the benefits however, the list of the obstacles one has to face in microscale analysis, is equally long. First of all is the issue of inferences, which will always remain an unsolved problem for archaeology because it is related to the very nature of its record. As Wilk and Rathje (1982:620)

put it: 'Archaeologists do not excavate households; they find the material remains of dwellings'. Consequently, one has initially to *infer* dwelling units from the material record, and at a second stage of analysis s/he can *infer* households from the dwelling units.

Furthermore, even for the simple task of identifying functional attributes and the activities that took place inside the structures, archaeological evidence is often problematic. One should not forget that Mesoamerican archaeologists were able to identify several functional activities because they had available an exceptionally well preserved archaeological record and they had also the advantage of ethnographic analogy, as many of the artefacts revealed in excavation, were still in use by contemporary communities and there was therefore no problem in the identification of their function.

Finally, depositional formation processes and the different temporal scales in the archaeological record (Smith 1992) are some of the additional reasons that constitute microscale analysis in archaeology a very difficult task.

Solutions, however, will only come if we address the problems directly. So far the 'excuse' of the poor archaeological record has marginalised household archaeology and limited its potential in the field of prehistory. When archaeology starts dealing with the issues of microscale analysis, then it will also find ways to deal with the related problems. Michael Smith, in his attempt to identify a unit of analysis that would reflect better the nature of the archaeological record, suggested already an alternative concept to that of 'household', the 'household series', which refers to 'the sequence of households that successively inhabit a given structure'. His remark about household archaeology could be a useful guideline for future research: 'Rather than simply borrowing analytical units from ethnography, as in the case of household archaeology, archaeologists should construct their own interpretative units to assign sociocultural meaning to the archaeological record' (Smith 1992: 30).

In the present thesis my aim is to examine the way domestic space was used in Neolithic Eastern Mediterranean at a cross-cultural level, and my focus therefore is more on the identification of dwelling units than 'households' themselves. The questions that I will be dealing with, refer more to the way structures were divided and used, the type of activities they housed, the differences between each other and the role they played within a community, than to the type of social unit they might represent. Having said that, inferences about the social structure of settlements will be inevitably made, and one has to note that usually all spatial studies because of their synthetic nature, end up dealing with relative issues: the social structure of a settlement, the type of social units involved in it, the organisation and nature of the settlement itself etc. (see for example Flannery 1972, Byrd 1994, Kent 1990). However, questions about the social form of societies require a range of analyses conducted at a very detailed level, and because of the cross-cultural nature of the thesis, it would be impossible to attempt such a research at the level of each particular site. It is only hoped that the present research will be able to contribute at least partly towards the understanding of these questions.

- **Final and preliminary reports**

It was initially thought, that for the purpose of the following analysis I would have to use information based only on final publications, for reasons that were quite obvious: detailed stratigraphic evidence, finalised periodisation, finalised classifications etc. In the course of the research however it became very clear that such a task was rather unattainable for the area of the Neolithic Eastern Mediterranean, because the bulk of information is so far published in preliminary reports.

The importance of published reports for a contextual and cross-cultural approach is very significant, and the differences in the quality of information between final and preliminary reports, have been discussed already (previous sections). Here however, attention should be drawn to some further points.

First of all the issue of the role of contextual information in archaeological reconstructions. Stratigraphic associations constitute the backbone of all archaeological excavations and they are the prerequisite in any kind of interpretation or reconstruction. Only when contextual information is available, real access and verification to the material can be achieved, as it constitutes the most meaningful aspect of the record and the one that is completely lost in the process of excavation (unlike the various artefacts). One would expect therefore, that especially for the case of occupational layers (floors within structures), information would be abundant, as they are identifiable in every excavation (differing in the degree of preservation of course), and they constitute an immediate unit of comparison, easily used even in preliminary reports (see for an example Garfinkel 1987).

With final publications being limited however, and preliminary reports aiming mainly to the establishement of the chronological frame for each particular site, it is only in articles that spatial issues come up (Byrd 1994, Kotsakis 1994, Özdogan, A. 1995), by researchers whoc are personally involved with the particular projects and as a result have access to *all* relevant information, necessary for a detailed review of spatial variability.

In conclusion, it will not be incorrect therefore to claim that lacking final publications, one is practically dealing with *interpretations* of the material rather than the material itself. And although personal judgement is involved at every single stage of archaeological research (see below), lacking final publications and contextual information, means in practice that we are lacking the 'text' we are supposed to read and understand.

Despite the difficulties, in the following approach, I examine both types of information, detailed (final publications) and general (preliminary), in an attempt to indicate the potential of both sets of data to contribute to our understanding of the way domestic space was used (see below).

- **Eastern Mediterranean**

Eastern Mediterranean is used here as a broad geographical entity which could provide a medium for synthetic studies in the region. Analysis is based on the material from four adjoining areas (illustration 1): Levant, Cyprus, Anatolia and Greece, with different cultural but also archaeological histories[iii]. Mediterranean sea is generally recognised as either a facilitator or a barrier for the exchange of culture and it would be almost unnecessary to stress that the term does not refer to a cultural entity. It provides a methodological tool, for the contrast and study of different material cultures, by placing them at a broader geographical context.

- **'Neolithic' period**

Neolithic period is the first period that provides traceable architecture for all areas under examination, although in different time spans. The use of a particular term at a universal scale can sometimes proved to be misleading because in a sense it homogenises different geographical areas and implies the existence of common/universal characteristics. The term Neolithic was initially used in Northern Europe (Özdogan, M. 1995) and was associated with sedentary life, permanent structures, domestication, pottery and agriculture, while its application to the archaeological record in the Near East has been proved to be rather unsuccessful and is challenged quite often recently (Thomas, J. 1993, Duru 1989:99). In Cyprus and Anatolia for example, substantial architecture and domestication are not accompanied by pottery making, while in the Taurus area (northern Levant), domestication is absent in sedentary communities for quite a while.

Reflecting all these different cultural traditions, the Neolithic period in the area of Eastern Mediterranean covers a time span of about 7.000 years (ill.2), and makes any attempt towards a cross-cultural approach to the material record, seem rather impossible. However, as it has been stressed by the theoreticians of cross-cultural analysis (see above), the problem lies rather to the *kind* of questions we are asking than the potential of our evidence itself.

For questions on trade and diffusion, chronological frames are definitely fundamental. For the particular questions we are asking here however, the focus seems to be elsewhere. The attempt in the present thesis, is not to identify temporal relationships but rather to examine the way in which different cultures and people were using, understanding and creating their own environment. In this sense, Neolithic period is used as a broad chronological frame rather than a tool for specific chronological correlations. The adoption of a cross-cultural approach with such a question in mind, could even test the definition of the Neolithic period itself, by highlighting its *meaning* with regard to the use of space and providing in this way a *different* framework for the study of past societies. Though one would recognised that these kind of questions are somehow 'alien' to the 'traditional'

[iii] Egypt is excluded from this sample because the studies about the Neolithic period in the area are very limited (for reference see Kemp 1991) and it was thought that it would not provide any new insights on the subject under analysis.

archaeological way of thinking, they are nevertheless necessary for the understanding of human past in a more holistic way.

3. 4 The nature of the archaeological record against a contextual and cross-cultural approach

The fragmentary nature of the archaeological record has been always a problem for the recovery of contextual information. Basic questions about contemporaneity of structures, house plans or the number of artefacts that were recovered on a particular floor, do not have always straight - forward answers. Furthermore, the examination of archaeological information from a cross-cultural perspective, poses for research some additional difficulties which refer to the 'compatibility' of recording systems or regional typologies and terminologies among projects in different sites. In the process of the analysis and in the frame of the parameters described above, a considerable number of difficulties came up which demand clarification and understanding. The most important of these issues are discussed below:

- *Stratigraphy*

Regardless of how one conceives context, whether in the sense of 'meaning - giving social context' of post-processualism or 'systems context' of new archaeology, it is important to recognise that the simple stratigraphic context of a site, is fundamental for any kind of further analysis and interpretation of the archaeological record. Having established its importance therefore, here I will concentrate on stratigraphy as part of the process of excavation, in order to understand its nature and identify its special characteristics. It is worth keeping in mind, that despite their long presence in the field, it is only in the last decades, that stratigraphic techniques have attracted the interest of researchers in a more systematic way (Harris 1979, Barker 1977).

Attempting a broad and inevitably simplistic definition, one could say that 'stratigraphy is the structure of soils that are divided into layers or other deposits that can be distinguished from one another' (Barber 1994: 81). Its importance for archaeology is twofold: a) the correct identification and interpretation of deposits, informs archaeologists about events that happened in the past, and b) the spatial relationships of deposits, and in particular the sequence in which they were formed provide a chronological framework for the history of a particular site.

a) *Identification of deposits:* One of the most important features of stratigraphy is the distinction of interfaces within a series of deposits. According to archaeological terminology, the boundary between two deposits is called a soil interface ('layer interfaces'), while the surfaces which mark the levels at which existing stratification has been destroyed by erosion are called unconformities (or 'feature interfaces') (Barber 1994: 82, Harris 1979:54).

The notion of 'face' is very important for archaeology, as 'the excavator can only examine the faces of the horizontal layers because of their unconsolidated nature' (Harris 1979:50). Furthermore, it is significant to keep in mind that stratification is a record that has both positive

(deposition) and negative (erosion or destruction) elements (Harris 1979:68), and that archaeologists are called to identify both. These elements are directly related to the study of spatial associations because the first step for any kind of analysis has to be the identification of a surface. Harris is very critical about the fact that usually excavators fail to record interfaces of erosion or destruction. However, one has to recognise that though in many cases this might be the result of false recording, it can also indicate the inability of excavators to identify these interfaces in very complicated contexts (e.g. Neolithic periods), a problem that Harris dealing with historical periods did not have to face.

b) *The identification of stratigraphic sequences*:

> 'A stratigraphic sequence may be defined as the sequence of the deposition of strata or the creation of feature interfaces on a site through the course of time. Unlike most geological columns of strata, the stratigraphic sequence on most archaeological sites cannot be directly equated with the physical order of stratification, as shown in sections. Those physical relationships must be *translated* into abstract sequential relationships.' (Harris 1979:109-111) (emphasis added)

One could therefore claim that though archaeological context is recoverable, and in that sense is not submitted to any kind of 'subjectivity', at the same time in order to gain meaning it has to be subjected to human judgement, and go through a process of interpretation. Furthermore, apart from this notional problem, there is also a very practical one, which has to do with the different recording systems and the 'language' that each excavator uses in order to indicate or describe one or another deposit or sequence.

Harris considers stratigraphic sequences one of the most important tasks for archaeologists, and insists that their identification should take place on site, during the excavation:

> 'The relegation of these tasks to the post-excavation period has allowed many archaeologists to ignore stratigraphic problems during the excavation, thus ensuring the making of faulty stratigraphic records. The immediate result is long overdue publication, or no publication at all. The result is the production of stratigraphic archives which are of little use to any re-evaluation of the site, in the light of new queries and research goals' (Harris 1979:119).

What is suggested therefore is the need for archaeologists to be aware of the difficulties involved in the identification of stratigraphic sequences, and state explicitly the methods that they use in order to identify and record stratigraphic layers and archaeological deposits. Though many of the recent publications already move towards this direction, the importance of this kind of information cannot be overemphasised.

The examination of contextual information from different excavations which is undertaken in the present thesis, indicates the importance of stratigraphic information in the identification of spatial patterns (see chapter IV: detailed analysis) and demonstrates the necessity to re-evaluate the way we approach, excavate and describe archaeological deposits.

- *Identification of formation processes:*

The identification of deposits and their understanding has been always a very difficult task for archaeologists, because it involves a whole range of formation processes, both natural and cultural such as erosion, disturbance and abandonment processes. Despite the improvement of our understanding for these processes, especially as a result of processual thinking and the contribution of experimental archaeology and ethnoarchaeology, in practice they still constitute some of the most puzzling issues for archaeological interpretation.

The question is simple. How do archaeologists, particularly prehistorians, identify erosion and disturbance? and how do they measure their scale on particular sites? Some of the most common empirical methods so far have been: i) the vicinity of a layer to the surface, ii) the erosion of architecture or features, iii) the existence of objects of a later period in a specific deposit, or even iv) the fact that a structure has been found completely empty. These kind of reasoning, though used in abundance in the past, poses obvious problems, if one bears in mind, that stratigraphic sequences should be understood 'by the analysis of the interfaces between strata' and 'not from the study of the soil composition of the strata or objects contained therein' (Harris 1979:30), or that an empty structure might indicate a different kind of depositional process (e.g. clearance before abandonment) and not necessarily disturbance.

The last decades have seen the development of several scientific techniques which try to solve these kind of problems. Refitting studies (Gamble 1991:16-17) provide a promising method of assessing the integrity of assemblages, while micromorphological and physicocemical properties of soil stratigraphic units, can now define climatic changes and correlate geological events with social responses (Weiss *et al.* 1993:996). However, bearing in mind the number of specialists and sources that such projects demand, it would be rather long before such evidence will be available for cross-cultural studies.

With regard to cultural formations now, 'abandonment processes' constitute one of the key factors in the formation of the archaeological record and are in essence the first set of 'dynamic processes' that archaeologists have to deal with. Since the 1960s, there has been an increasing interest in the investigation of the effect that abandonment has on the archaeological record (Ascher 1968, Schiffer 1972, 1976, Binford 1977, 1978, Gould 1980, Yellen 1977, Thomas, G. 1995).

In one of the most recent publications on the subject of abandonment processes, by Catherine Cameron and Steve Tomka (1993), attention is drawn to the basic assumptions archaeologists make about artefact distributions. Because of the regularity in which such assumptions occur in archaeological literature, it is probably useful to recall the relevant extract:

> "Should we assume that artefacts found on room floors were left exactly where they were used? Were they dumped there days or hours before abandonment when normal clean-up processes were relaxed? Were they, instead, cached for later use during an anticipated return? Do they represent trash tossed into an abandoned room years before the settlement was abandoned?"(Cameron 1993:3)

Stimulated by these kinds of questions and with the contribution of a series of ethnographic and archaeological studies, there is an attempts in the book, to indicate and understand the factors that condition the variable processes of abandonment. Emphasis is laid on the different scales of abandonment (regional and / or intra-site), the nature it might undertake (episodic, seasonal, permanent), or even the different kinds of abandoning activities it might represent (planned or unplanned). Though the analysis focuses mainly on foraging and semi-sedentary societies, giving little emphasis on sedentary contexts, it is obvious, by the universality of the phenomenon of abandonment for the formation of the archaeological record, that such a study is directly related to any kind of archaeological context.

Of particular interest in the same book, is the ethnohistoric analysis done by Robert Brooks on the sedentary societies in the Great Plains region of the United States, regarding the identification of the factors that condition abandonment processes at an intrasite level (Brooks 1993:178-190). The main idea behind his attempt, is to identify certain criteria for the determination of house-floor integrity, which would enable him to indicate whether a house's contextual integrity represents planned or unplanned abandonment. The evidence, seems to point to two kinds of criteria (termed as 'floor correspondence measures'): the first refers to architectural features (posthole characteristics, and spatial distribution of structural elements) while the second refers to artefacts (the size effect, refit sequences and spatial distribution of items on the house-floor). According to the analysis, posts or other structural elements of a house that have been disturbed would indicate planned abandonment, while structures which their architectural features have not been disturbed and their artefacts have a large size, constitute refit sequences or point to the existence of working areas, will be indicative of unplanned abandonment.

Brooks stresses the point that all these measures should be used with caution and should be examined in relation to each other (Brooks 1993:186). Furthermore one has to add, that based on a case study, these criteria would have an uncertain validity at a cross-cultural level, because planned abandonment in another culture might be expressed in different ways. Nevertheless, the result of this research retains its importance for two main reasons: i) because it warns archaeologists that not all houses provide the same quality of spatial information and are abandoned in the same way, and ii) because it suggests measures that are recognisable by archaeological practice.

The difficulties go beyond the complex nature of the record itself, however, into matters of priority of objectives, availability of resources and appropriate training of field workers. It seems therefore that it would be long before researchers will be able to identify different modes of abandonment on the archaeological record, and accommodate them into their interpretations.

Having said that however, and while specialised studies on the subject might be pending for a while, one could ask archaeologists to be more careful with their descriptions about occupational layers, drawing their attention to the fact that deposits have meaning themselves and they should not

be acknowledged only for the temporal and regional frame that can provide to studies about objects and features.

- *Identification of contextual associations:*

Despite the difficulties posed by the record however, there are also others that are directly related to our practices. The identification of the actual nature of disturbance on the record is one thing, but what do really archaeologists mean when they refer to 'disturbance' or '*in situ* artefacts' is quite another. There is therefore a very serious problem of terminology, especially in the attempt to select information from different sites.

The phrase that 'a floor has yielded associated *in situ* artefacts' usually is translated as bearing an undisturbed context, with the implication that the artefacts were found at the same position where they were left when the structure was abandoned. It is therefore a stratigraphic term.

The meaning of such a phrase however, in archaeological practice is not at all clear. How do we identify whether the artefacts on a floor were left *'in situ'* or were disturbed? Archaeologists usually give very brief accounts of their recording system, and sometimes one gets the impression that they identify a context as *'in situ'*, when they can detect patterns in it. It is obvious that in these kind of identification stratigraphic information plays a quite insignificant role. Furthermore, ethnoarchaeological experience has pointed out to a number of different abandonment and depositional processes that though constituting *'in situ'* deposits would result in very different spatial patterns (e.g. planned/unplanned abandonment processes; see above). It would be rather incorrect therefore to assume the lack of disturbance in a deposit, just because *we* can not identify recognisable (*to us*) patterns.

Additionally, there are cases, where only a small portion from all the artefacts associated to a floor, could be identified as *'in situ'*, and as a result the distinction between disturbed and undisturbed units could become even more complicated. Finally, even the term of 'associated to the floor finds' needs clarification as it depends on each specific recording system and might include finds for more than one deposit.

All above examples aim to show the necessity for excavators to be more explicit with the methods they use, and highlight the misunderstandings that one could prevent, and the benefits s/he could gain, in viewing archaeological material from a wider and more holistic perspective.

- *Contemporaneity:*

Directly related to these issues of stratigraphy is the problem of contemporaneity in the archaeological record, or in other words the impossibility, in some cases, of establishing relations between the 'life cycle' of structures within a site. Some of the difficulties of this problem result from the nature of the archaeological record itself (e.g. the different 'rhythms' of deposition that inevitably exist between the interior and exterior of structures;), and others depend on excavation techniques or even the objectives that each archaeological project has and the time it is willing to

spend on periodisation and chronological refinement (Smith 1992:27-28). It is important to keep in mind, that it is only in the last decades that the issue of spatial analysis and the investigation of behavioural patterns became of real interest to archaeology, and as a result it is only recently that there has been a demand for the excavation of bigger samples of archaeological sites, and for the need to deal with the issue of contemporaneity. The excavations that were conducted in the first half of the century, having as their main objective to establish chronological and cultural sequences, were hardly paying attention to the excavation of complete units[iv].

Indeed, in the last years, the issue has been discussed, from both a theoretical (Papaconstantinou 1986, Smith 1992), and practical (Bordes 1975, Binford 1980, Butzer 1982) perspective. The development of more sophisticated methods of stratigraphic control (e.g. the use of three-dimensional co-ordinates for recording objects), along with the introduction of refitting studies for the investigation of conjoinable pieces which are spread over vertical distances (e.g. Schild 1984, Villa 1982), and the study of the size of artefacts which according to the ethnoarchaeological experience could play a role in their location of discard (Binford 1978, O'Connell 1987), have created an optimistic atmosphere and have been recognised by many scholars (Gamble 1991, Whitelaw 1989) as the way forward for the understanding of the problem of contemporaneity in the archaeological record.

However, despite the importance of the methodological improvements, in some cases it is impossible to obtain satisfactory answers for all kinds of problems. It is therefore necessary for archaeologists to realise and accept the limits of their record, learn to be flexible in their approaches and adapt their questions accordingly.

On this basis, the present thesis does not seek to re-evaluate the phasing and stratigraphic sequences in each particular site. The analysis is *based* on the information provided by the publications and uses the excavator's assessments as a starting point. After collecting the evidence from each floor, it compares the depositional and typological variability from each phases and at a second stage it examines the differences observed within each structure.

Following this process, one has to keep in mind two points: a) the comparison at the level of floors, indicates the dynamic of a settlement highlighting changes *both* within and between structures (identification of 'household series' mentioned by Smith 1992; see above) and b) the periodisation and phasing, provides an 'illusion' of synchronism in what is actually a diachronic 'display', and for this reason although it is a useful tool for analysis, it can never help researchers reach conclusive statements about synchronic reconstructions. The examination of particular phases therefore, refers more to 'examples'/'instances' of the way space was used during a particular phase, rather than to the 'real' network of spatial organisation and structure of a settlement at a particular time.

[iv] Exceptions of course do exist, as in the case of Soviet archaeology, where emphasis on social structures, led to the excavation of whole settlements; Trigger 1989: 216-243 .

Having said that, it is still worthwhile making the attempt to study intrasite spatial variability at a microscale level (based on occupation layers), because a comparison between phases could provide better insights about the degree in which certain periods differ between themselves, while a detailed analysis within structures, could reveal the dynamic processes which are reflected in the archaeological record. So far comparisons among phases are usually made on the basis of general characteristics. A microscale analysis highlights the diachronic depth of the archaeological record and can offer a different perspective for the study and understanding of social relations and change.

- *Typology:*

Finally, another issue that requires spatial reference in relation to contextual and cross-cultural studies, is that of typology. The problem is quite simple but fundamental. How is supposed the archaeologists to put in one line and compare artefacts from different sites, taking as criterion their function? How is s/he supposed to tackle cases in which, two objects from two different sites have the same function but different names, or the reverse, namely the case in which objects belonging to the same type are presumed to have different function in two different sites?

What initially seems only a problem of recording, constitutes essentially one of the most difficult and complicated problems in archaeology, that is: the purpose, definition, and formulation of archaeological typologies. Additionally, with regard to spatial studies, it relates to the problem of the identification of the function of archaeological objects. The role of classification and typologies in archaeology is of course indisputably fundamental. However, one could say that similarly significant are the misunderstandings and problems that these have caused to archaeological enquires, both at a theoretical and practical level. The current literature provides a number of very constructive and analytical works on the subject (Adams & Adams 1991, Whallon & Brown 1982, Gardin, 1980, Klejn 1982), and although it would be beyond the scope of the present thesis to deal with these issues in detail, it is necessary to discuss at least briefly, some of those issues, which are related to spatial studies, and in particular the investigation of activity areas.

The main purpose of functional classifications and typologies is to help to the identification of activity areas and the reconstruction of activity patterns. The interest in behavioural patterns and function, started for archaeology in the middle of the century, and it was the result of the influence of relative developments in the field of ethnology (Adams & Adams 1991:268-271). The concept of function was equated with that of 'use' and 'meaning' and it had therefore interpretative implications of what people did and thought. Later processual archaeology emphasised even more behaviour patterns and the function of artefacts, while post-processualism made the distinction (that was long acknowledged in ethnology) between function and meaning.

Despite the increasing interest, 'the making of purely functional artefact typologies is really very rare, at least in prehistoric archaeology' (Adams and Adams 1991:222). The reason for this is quite simple and points to the role that classifications were called to play in archaeology and the

failure of functional typologies to serve this role. Any kind of type, has two essential qualities: a) purpose and b) identity (Adams and Adams 1991:168).

The prime aim of archaeological classifications was to place objects in time and space, in order to obtain a chronological and spatial frame and to be able to fit in this frame new evidence, by predicting when a particular site could be dated.

> "... chronological/spatial classifications give more attention to stylistic than to functional attributes, since these are the features that are most likely to vary from time to time and from place to place." (Adams and Adams 1991:220)

So in reality, though archaeology during its history progressed and focused on different questions, its classifications, could not adapt and follow the needs of each theoretical movement because 'the old questions of time and space context' had still to be answered first (Adams and Adams 1991:312). It is therefore evident that functional inferences are usually made, a posteriori, on types that have been defined mainly on stylistic grounds.

However, additional to this problem of purpose, there is also another one, that of identity. Functional types are usually defined by extrinsic, *inferential* variables and attributes, which means that they cannot be discovered empirically, but they rather 'involve inferences that we ourselves make about the objects we classify' (Adams and Adams 1991:175-176). These inferences are usually made by the archaeologists on the basis of the observable form of the artefact. The recent years have seen the development of new techniques such as microware analysis (use-ware analysis), which are able to identify what a particular artefact was used for, but being new and time consuming these kind of methods are usually applied only on a small sample of artefacts. Consequently, the classification of artefacts so far, is based on a *presumed* function: "Categories such as "scraper", "chopper", and "graver" have been given names indicative of a *presumed* function, but in reality these tool types are differentiated on the basis of form attributes, not on the basis of any secure knowledge of their use" (Adams and Adams 1991:285)(emphasis added).

Finally, and maybe most importantly, one has to bear in mind that typologies, from their formulation (selection of variables) to their usage (sorting: putting artefact in particular types), involve a process of continual decision - making, namely human judgement. It is therefore recognised, that leaving aside any claim of objectivity, what should be looked for in typologies is 'consistency of judgement' (Adams and Adams 1991:200-201) . The problem of course with cross-cultural studies is that though one would hope that could find consistency in one persons judgement about one typology, it is rather impossible to expect to find it among different publications on typologies constructed for different sites.

No matter how discouraging such a realisation might be, one should not be misled and should keep in mind two fundamental characteristics, that could actually help research to deal with the above problems: a) that classifications are conceptual and measurement devices and do not explain things and b) whatever truth they might contain is truth by definition.

> "As with all tools, they have to be judged by their utility, not their validity. The ultimate test is not whether they are true or false, but whether they work for any particular purpose." (Adams and Adams 1991:312)

As in the case of stratigraphic sequences therefore, here it is also essential, for archaeologists, to explain the reasoning and the process behind any stage of their analysis, this being description, classification, inference, or interpretation.

3. 5 Methodology and analysis: an outline

The aim of this section is to outline the way in which archaeological material was approached and examined in the present research and facilitate the understanding of the following analysis.

The main objective of the methodological process undertaken was to extract from the archaeological record (or more precisely the published reports) contextual information for the study of the use of domestic space in Neolithic Eastern Mediterranean at a cross-cultural level. The majority of Neolithic sites under examination have been published in the form of preliminary reports, and it became therefore evident from the beginning that one had to deal with two sets of data: one for which detailed contextual information was available, and another which provided only selective and general information. Consequently, the material had to be treated in two different ways, and the questions had to be modified, according to the nature of the evidence. Despite the difficulties, the undertaking of the analysis was considered worthwhile, as the aim of the thesis is not merely to identify possible patterns in the way domestic space was used in Neolithic period, but also to investigate the 'real' and 'artificial' barriers that archaeological research has to face in dealing with this kind of questions.

Each section starts with an introduction of the archaeological history and activity related to the Neolithic period in each particular area, and at a second stage, examines the available information concerning structures and their furnishings on a phase to phase basis. In the case of Cyprus a supplementary section has been added, which examines in detail the contextual information from three sites: Khirokitia, Sotira and Vrysi, which have been extensively excavated and provide detailed information. There are therefore, two levels of analysis: a general, which covers all areas under examination, and a more specific one, which concentrates on the three sites from Cyprus which provide the most detailed contextual information.

The **general approach** to the material came out of the necessity to make the most of what it seemed to be a rather limiting piece of evidence, in the form of very selective or very general reports, incomplete excavations and continuous updating and revisions from projects which are still in progress. It was soon realised that the task to isolate floors and their content from the structures excavated was unattainable, and as a result emphasis was mainly put on general patterns: the publications and the nature of information they provide, the settlements, their layout and size, the

structures and their type of segmentation (see app. I), the features and their presence inside and outside the buildings, and finally the depositional variability observed on each site, described either in general statements by the excavator, or through specific examples. The information for this particular approach is displayed in four different sections of illustrations: for Cyprus: ill. 14-22, for Levant : ill. 133-141, for Anatolia: ill. 153-161 and for Greece: ill. 177-185.

Due to its general nature, this information might resemble the synthetic studies which have been done so far in the area by Gebel (1984) and Hours (Hours *et al.* 1994, but see Aurenche 1981; see also above). However, the present analysis does not aim to the general presentation of *all* the material available from the area, as these studies seem to have done, but it has a specific purpose, and question in mind. It attempts to extract specific information related to the use of domestic space in order to create a cross-cultural database that could 'stand' against the suggested anthropological models about spatial behaviour and domestic activities (Flannery 1972, Kent 1990). Although general therefore, it has a very specific focus which refers to the structures in Neolithic Eastern Mediterranean and the way they were used.

The lack of detailed information, causes undoubtedly problems in the validity of the patterns produced, as there is no possibility of cross-checking or evaluation of the material. The analysis however aims to show, even with those tentative results, the potential that such an approach could have for archaeological research and the necessity for further, more detailed studies towards this direction.

The **contextual approach** seeks to investigate the potential of an analytical study when detailed - contextual information is available. The particular approach can be divided into three stages (see figure 1): a) the primary evaluation of the available information and inspection of the degree of disturbance on the structures and floors under examination (DQCF I, vertical control), b) the material under examination, and c) the final screening of the information for the identification of the best preserved and most reliable for analysis units/floors (DQCF II, horizontal control). It should be reminded that this analysis refers only to three particular sites from Cyprus which provided the relevant information: Khirokitia - Vouni, Sotira - Teppes and Ayios Epiktitos - Vrysi.

a) Degree of Disturbance (Data Quality Control Factor I - 'Vertical control')

The first step of this process is to isolate all the occupational layers (floor deposits) excavated in a particular site, to evaluate how sufficient they are in providing information about spatial associations and to examine the quality of data obtained by each one of them.

The most important factor for such an assessment is the degree of disturbance that is detected on each floor. The distinction here is based on the excavator's own assessment (which is usually the result of empirical observations: vicinity to the surface, heavy water activities, cuts by later pits or graves etc.) and of the nature of the deposit which overlies each floor. The way in which this information has been treated and used by the present analysis, is described in a separate section (appendix V: table 1) and it is available for cross-checking.

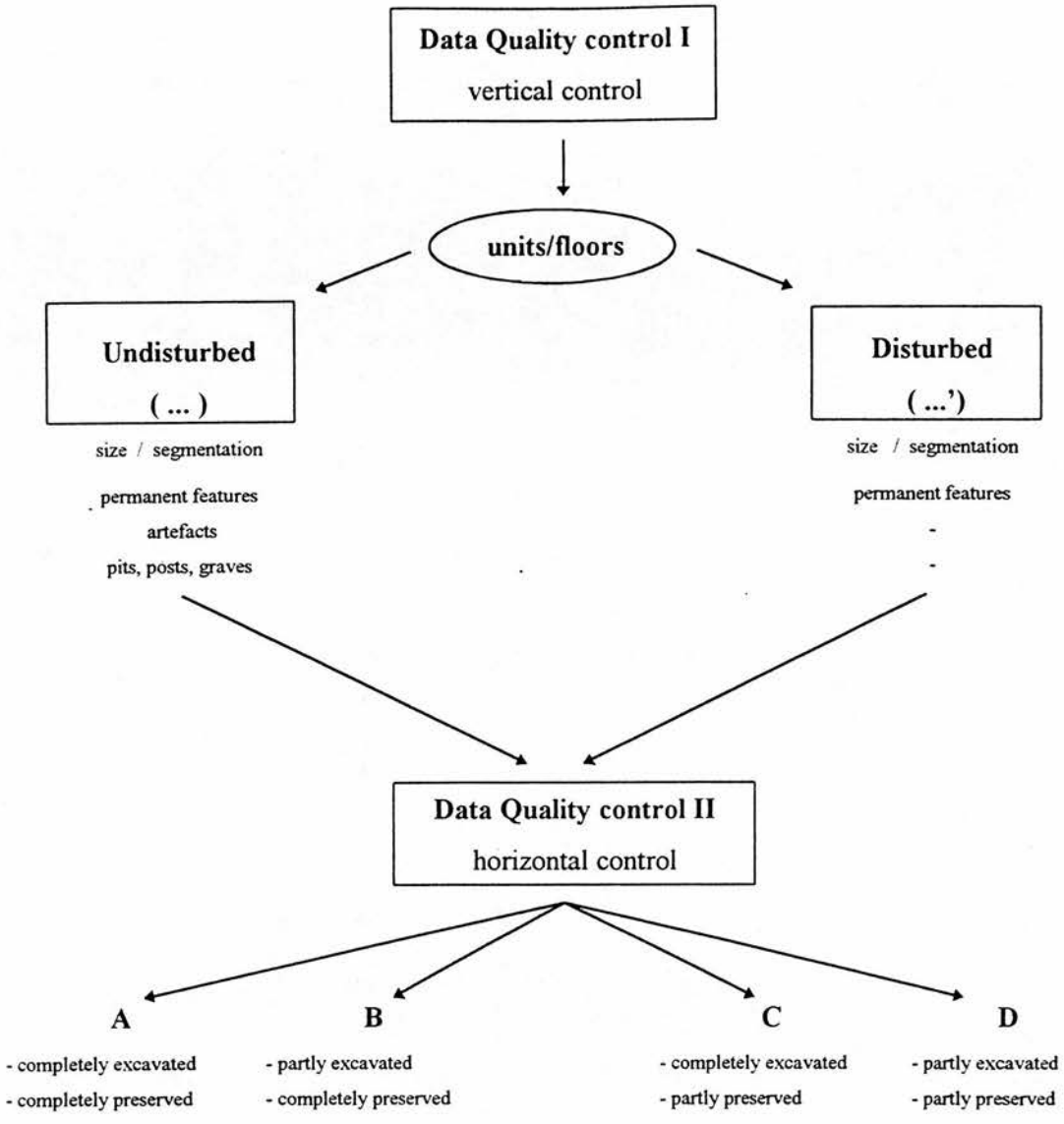

Figure 1: Contextual approach: evaluation and collection of data

Floors/units which bear no traces of disturbance are marked with a unique number (e.g. 1,3,4 etc.) while the units which are considered disturbed are additionally marked with an apostrophe (e.g. 2', 5' etc.). For the first category all information about features, artefacts, posts, pits and graves is collected, while for the second, information about the last four types (artefacts, posts, pits and graves) is omitted, because these are difficult to associate with particular floors when the deposit is disturbed.

b) The collection of data.

The present analysis will not deal with the spatial organisation within each structure and the identification of specific activity areas. Its focus is on structures in general as entities (bounded space), the presence and absence of certain types of features and artefacts on floors, and most importantly the association of features and finds between floors, structures and sites.

Furthermore, the analysis is not concerned with elements of construction (which has been done elsewhere: see Aurenche 1981) although it examines the existence of posts, partition walls or pillars because they constitute physical barriers and they help to understand the way in which the space in each floor was actually divided and used.

One of the most serious problems for the present research has been the identification and compatibility of functional typologies among different sites and projects (see discussion about typologies above). As a result, categories used for the collection of data in the following analysis are deliberately very broad, allowing in this way some flexibility for the 'idioms' of each publication and at the same time providing a general framework for further comparisons.

In order to facilitate this process, a separate section has been created (appendix II) in which all the types of features and artefacts along with their presumed function (according to the director) are recorded with reference to each publication. In this way the reader can both check the way in which the information from each site is used by the present research and at the same time examine the shortcomings and differences between the typologies of different projects.

The information collected (app. V) could be roughly divided into four main categories: i) size - segmentation, ii) permanent features, iii) artefacts, and iv) secondary features (such as pits, posts and graves).

i) Information about size and type of segmentation:

a) size: this is considered to provide the most basic unit of comparison within and between settlements. In their majority, publications do not present the size of floors in m^2 but in length and width. For the purpose of this research, and in cases where the information was lacking, I have used a 'planimeter' estimating the size of floors in m^2 with a standard deviation of 10%.

b) types of segmentation: these types mainly refer to the presence of partitioning walls, buttresses, basements etc. and they constitute a very distinctive functional group in the sense that their only reason of existence is to divide or add space. Other permanent features such as platforms, or hearths might also have as a result the partition of space, but this is rather a secondary role and

not their primary function. Space within a structure can be divided either horizontally (in the form of additional rooms) or vertically (in the form of basements, and lofts). These are the two axis on which the specific typology in the following analysis is based. Letter B is used for horizontal partitions and letter C for vertical (see also app. I).

ii) Information about permanent features:

Permanent features constitute the most solid evidence of the dynamic processes that were taking place within the structures, and because of their nature, they can be safely examined in both undisturbed and disturbed units.

Though a record is kept for all separate types identified in each publication (App. II), the actual treatment of this information in the present database is quite different because of the typological differences. All types are classified under three main categories ('hearths', 'platforms', 'fixed containers'), and it is the variability (presence and absence) among these categories that will be examined later in the analysis. It is important to note that the categories do not represent specific forms, but rather a wider range of forms and functions which are nevertheless interrelated. Under 'hearths' for example one can find, very elaborately built fireplaces or simple carbonised areas, while the same would apply for both 'platforms' (well demarcated by pisé and stone or plain pavings) and 'fixed containers' (stone built basins or simple plastered pits).

In this last case actually one has to be very careful with typologies because what might be classified as a pit for one excavator might be a fixed container for another. In the present database we keep a separate record between what excavators call pits and fixed containers and later in the analysis we examine their relation according to form and content (here again typological differences are recorded in appendices).

iii) Information about artefacts:

Artefacts can represent the most direct picture of a building at the moment of its abandonment but one should be more aware of the effect that post depositional processes might have had on the patterns they reveal. Therefore, information about artefacts is collected only from undisturbed units.

The categories used in the database in relation to artefacts are four: implements, miscellaneous, vessels, and other/unspecified finds. Implements: include all types of tools (needles, axes, hammers, chisels, rubbers etc.) as well as cores, flakes and blades. Miscellaneous cover a wider range of functional types (beads, pendants, pins, figurines etc.), and in general they refer to objects that were used in everyday life and could not be considered tools. Vessels include pots made of pottery or stone, and finally unspecified finds refer to a number of either broken, unfinished or unidentifiable objects, that were found in association to a particular floor but could not be related to a particular type.

This last category could provide very interesting information of the actual state of the floor when, or soon after it was abandoned. For the same reason, we also collect, where available, the

number of sherds, as well as the number of animal bones found on each floor. Though this kind of contextual information is rarely found in publications, we hope to demonstrate in the present thesis, the necessity and usefulness of taking into account *all* related information about floors in order to achieve a better understanding of both processes of formation and abandonment.

iv) Information about posts, pits and graves:

As already mentioned this information is considered important because it divides and marks the interior space, though not always deliberately (as for example in the case of posts for the support of a roof). No additional information is collected for graves but for pits evidence related to their content is recorded in order to be available for further analysis.

These features are recorded separately from the other permanent features, because their nature makes it very difficult to distinguish from which exactly level were cut. For this reason, information is collected only for undisturbed units, where this kind of fine distinctions must have been easier to make. One should note that this is one of the most ambiguous pieces of information because apart from being very difficult to recognise, it constitutes by its nature, one of the main reasons of disturbance in the stratigraphy between floors.

c) *Degree of preservation (Data Quality Control Factor II - 'horizontal control')*

Finally the second level of data quality control, refers to the proportion of structure that is actually revealed and preserved at a horizontal level. This type involves two levels: a) the natural process of preservation and erosion of the site by its environment, and b) the way that a site has been excavated by a particular project (figure 1). This distinction is quite important, because apart from the need to create homogenous units of comparison, one has also the opportunity to distinguish between the limits in the nature of the archaeological record and the artificial limits posed by archaeological practices. Indicative of current research but also encouraging for the future, is the fact that recently (Byrd 1994: table 2, pp. 645), research has recognised the necessity for such a quality control to the material.

Following the above reasoning the units/floors under examination are divided into four main categories, according to their treatment by the excavator and their degree of preservation: A/ units completely excavated and preserved, B: partly excavated but completely preserved, C: completely excavated but partly preserved, and D: partly excavated and partly preserved. (see also app. V).

Process of analysis

After a brief introduction regarding general information about each site and a review of the sample available for analysis, the examination of the material is divided into two section: Level I, which examines differences in size, segmentation types, features and finds throughout the phases of each particular site, and Level II, which concentrates only on the undisturbed and completely

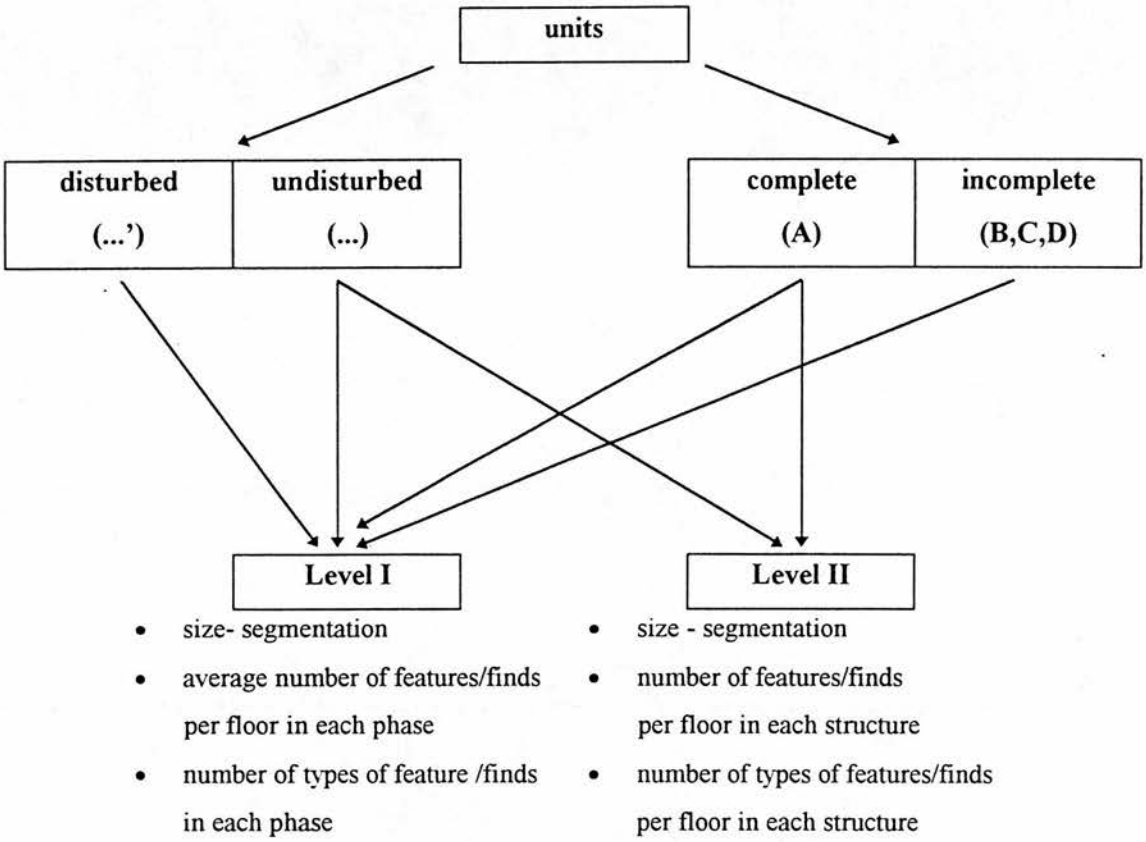

Figure 2: Contextual approach: process of analysis

excavated and preserved units, and taking into account the same information as above, examines differences between particular floors and structures (see figure 2).

In Level I, the comparison among features and finds is based: a) on the average number of features and finds per floor in each phase, and b) on the number of types (of features and finds) identified in each particular phase (see app. III). In Level II the comparison is based on the real number of features and finds recovered from each particular floor (see app. IV).

3. 6 Conclusions

In summarising, the following points should be kept in mind:

1) with regard to cross-cultural studies and their role in archaeology:

- If archaeology needs to be part of a wider 'open network', and develop beyond regional schools and studies, as indeed many scholars suggest (Gardin 1980:149, Sherratt 1993:126), a cross-cultural perspective in the way we approach the material, could help make archaeological data more accessible and comparable.
- Furthermore, cross-cultural approach helps to view archaeological methods and problems from a wider perspective, and in that sense identify better their validity and shortcomings.

2) with regard to spatial studies and microscale analysis:

- Spatial studies provide a more holistic and therefore 'complete' picture of the archaeological material.
- Despite the emphasis that is usually put on studies about technology, stylistic variation in pottery, subsistence etc., archaeologists, in one way or another, always use spatial associations (contextual information) in order to give meaning to their interpretations about social structure and organisation. The information is therefore even implicitly used in archaeology in abundance.
- Analysis at a microscale level (that of structures) provides the minimum unit of analysis in settlement archaeology, and as such constitutes the basis for any other study at a larger scale (comparisons within or between settlements).
- Apart from providing an ideal analytical unit, microscale analysis also relates to matters directly dependant upon the nature of the archaeological record (as for example the association between finds and floor deposits, the functional types of artefacts etc.), and has as a result the re-evaluation of long-standing preconceptions and 'false' practices.

3) with regard to anthropological models:

- Because of the nature of the information related to spatial studies (combination of context, artefacts, features and structures) it is necessary to have a starting point, a model of meaningful variables that would provide the basis for an analysis. The question of 'what should we be

measuring in order to study behaviour from living areas' has been long recognised as a problematic area for archaeology (Gamble 1991:15) and it still remains open.

- In relation to the way past societies were using domestic space, there is a couple of anthropological models that have been suggested to archaeology, based on ethnographic material (Flannery 1972, Kent 1990), but none of these has been tested so far on the archaeological record. In the present thesis, rather than attempting to test the particular models point by point, I will concentrate on the question of how sufficient the archaeological record is in order to deal with this kind of models. Recognising the fact that in archaeology the validity of anthropological models is often taken for granted, I will examine the evidence, against which the suggested models would have to be compared, and attempt to distinguish between problems which derive from our practices and problems which are related to the nature of our material.
- The attempt to test the applicability of anthropological models on the archaeological record, could prove beneficial for both disciplines: for anthropology, because it tests its models and points exactly to the issues that archaeological research needs help; and for archaeology, because it tests its potential to deal with and apply this kind of models and at the same time evaluates archaeological methods at a broader level.

4) with regard to the particular area and period under examination:

- The archaeological record from the particular area (Eastern Mediterranean) and period (Neolithic) presents quite unfavourable conditions for spatial studies, but at the same time it has been submitted to extensive research since the beginning of this century. It constituted therefore, in a sense, the most appropriate sample in order to examine the limits and potential of both archaeological practices and the nature of archaeological record at a cross-cultural level.
- Furthermore, this is an area in which anthropological models (especially Flannery's of 1972) have been used in abundance in archaeology, and it would be useful to see against what kind of information current archaeological reconstructions are based on.

CHAPTER IV

CYPRUS

Identifying domestic space in the Neolithic period: archaeological activity and available information

> "...the solution of intricate problems related to cultural changes should not be based on one or two isolated phenomena or the examination of limited categories of objects, but on a global survey of everything that is known about the period under discussion in order to achieve convincing interpretations." (Karageorghis 1989:x)

4.1 Introduction

The archaeological activity in a specific area is usually the result of a combination of factors: a) the way that a country looks upon its past, b) the impact that this past might have had on other countries and cultures, c) the role that archaeology is called upon to play in a specific society, and d) the objectives that archaeology has set for itself generally as a discipline.

Cyprus provides an exceptionally rich, diverse and well published material record, which has been the result of a history that goes back at least 7.000 BC, and an archaeological activity which started, though in an 'embryonic form', already from the previous (19th) century (Goring 1988, Karageorghis 1969, Knapp 1994, Peltenburg 1997).

The present chapter examines the available information related to Neolithic structures and their furnishing on the island, in an attempt to outline the variability in form and usage of Neolithic architecture and investigate the methodological problems and the potential that such a study could pose for archaeology. Cyprus comprises a unique example of well preserved and excavated archaeological sites, and for this reason it could be considered in many ways the 'ideal' area on which such an holistic analysis could be applied.

Before the examination of the material, I shall attempt a very brief outline of the history and the role that archaeology played on the island. This 'background knowledge', is considered necessary in order to understand better the 'environment' in which Neolithic research developed on the island. For this reason a similar introduction is provided for all the areas that are examined in the present thesis (see also chapter V).

4.2 Neolithic period and archaeological activity in Cyprus

Archaeology in Cyprus was considered, for quite a while, rather insignificant (Gjerstad 1934:xiv). This was partly the result of its geographical position, between the Orient and the Occident, but also of its history: being subject to a series of occupations and part of the British Empire for the largest part of the 19th and 20th century (1878-1960), Cyprus was unable to define its origins and nationality itself and was therefore left to follow, in relation to archaeology, the interests and tendencies of western scholarship.

In the first second of the nineteenth century there was a great interest towards the collection of coins and inscriptions (Karageorghis 1969:22-34) on the island, while later in the second half of the same century, more 'organised ' attempts for the 'excavation' of 'treasures' started, with the most characteristic example, the 'activities' of the U. S. Consul Luigi Palma de Cesnola of Italian-American origin (1865-1977). In general, during this period several foreign museums and individuals undertook expeditions and excavations on the island (e.g. British Museum from 1890-1896), while at the same time sir John Myres from the Metropolitan Museum of New York (Myres, 1914) conducted the first stratigraphic excavation in order to establish a chronological sequence in Cypriot archaeology, based on Cesnola's collection.

Although the Museum in Nicosia was founded as early as 1883, initially it was maintained wholly by private subscriptions, while the excavations on the island were conducted on behalf of various individuals and foreign institutions (Karageorghis 1985:1). It was only after 1905 that archaeological activity on the island started seriously, when British Administration started showing an interest in antiquities (with new laws, Museums etc.) and created finally the Department of Antiquities in 1935 (Karageorghis 1985:2).

Indeed, up until 1934 no significant scientific attempts had been made to study Cypriot culture, and as Gjerstad noted 'exact knowledge of Cypriot culture is rather scanty, from the fact that comparatively little of the available archaeological material comes from scientific excavations (Gjerstad *et al.* 1934:xiv). One should keep in mind that for western scholars, who had an overall classical training on Aegean, Anatolian or Levantine cultures, Cypriot archaeology was accepted with great difficulty as an equal 'partner' in the Near Eastern setting (Gjerstad *et al.* 1934:xiv, Knapp 1994:378). As Peltenburg put it succinctly: "Cyprus was neither Oriental nor Greek, but a hybrid unworthy of study by scholars of the 'great traditions'" (Peltenburg 1997:70).

It is not a coincidence that the first organised excavation program (Swedish Cyprus Expedition 1927-1931) was initiated at the same time (1927) when the old antiquities law was modified to permit the export of antiquities (Peltenburg 1997:71). This event helped Gjerstad to obtain funding for his project and from a historical point of view, shows the role and the purpose of archaeology at that time in the west.

Gjerstad can be considered indeed a pioneer in Cypriot archaeology because his project was the first serious attempt to examine the entire cultural history of the island of Cyprus, and with his research he gave to the island a role into the Near Eastern world, both as a 'connecting link' between the Orient and the Occident and as a 'creator' of an indigenous civilisation which at different times reached high standards (Gjerstad *et al.* 1934:xiv). At around the same time, large scale excavations were already undertaken all over eastern Mediterranean (see chapter V).

Colonial period was characterised by Karageorghis as a period where "archaeological activity in Cyprus was a local affair with the exception of a few isolated cases of foreign involvement" (Karageorghis 1989:1). The main interest of the Department was to 'repair and restore ancient monuments', and despite its several efforts to improve archaeology on the island: with an extensive program of excavations (by Dikaios, even for the early prehistory: Khirokitia), and rescue projects concentrating mainly on Byzantine and Medieval sites (Karageorghis 1985:4), there seemed to be no clear policy about the role that archaeology had to play in relation to the present and the past. Characteristic in this respect is the fact that director of the Department for most of the colonial period (1936-1960) was Mr. A.H.S. Megaw who was an architect and not an archaeologists. Although his contribution to the program of preservation was valuable (Karageorghis 1985:4-5), his professional background is a good indicator of the direction of interest that the Department of Antiquities had at that time.

Despite the shortcomings however, the declaration of Independence found Cypriot archaeology flourishing. But, it was only after independence, and especially with the Directorship of V. Karageorghis in 1963, that the Department of Antiquities adopted a clear cut policy about the role which antiquities had to play in the new born Republic. That policy consisted of two main elements: the contribution of the antiquities to the development of cultural tourism and to the awareness of national identity (Karageorghis 1985:6). This was a period of 'opening up' the island to 'international co-operation in archaeological research' (Karageorghis 1989:ix) and one in which foreign researchers were encouraged to undertake any kind of archaeological activity: excavation, survey, restoration, with strict scientific requirements, and published reports as a final product (Karageorghis 1985: 6-7).

Karageorghis' own words in 1985 describe in the most characteristic way the climate after the independence:

> 'It was, and still is, my firm belief that interest in the archaeology of Cyprus could be kept alive only if a liberal policy towards foreign scholars was followed. It was my ambition to make Cyprus a field where archaeologist from many nations could work in cordial collaboration with the Department of Antiquities. There was, and still is, a place for all good scholars on the Island. Thus, in 1972 the number of foreign missions excavation in Cyprus totalled seventeen. Cypriote archaeology was no longer a local affair, but had acquired international dimensions.' (Karageorghis 1985:7)

This general policy of encouragement towards foreign archaeological missions, contributed to the development of a flourishing archaeological community on the island and had as a result the development of Cypriot archaeology into a separate and autonomous field within the context of Near Eastern studies (Knapp 1994:434).

As the two main aims of the Department: cultural tourism and national identity have practically 'formed' archaeological activities on the island, they deserve some more attention and should be viewed through the efforts of a new-born republic to gain a place in the international political setting. National identity was strengthened by emphasising the 'Greekness' of the island as indicated by the fact that the first two international symposia about Cypriot archaeology concentrated on its relationship to the west (the first International symposium organised by the Department in Nicosia in 1972 was 'The Mycenaeans in the Eastern Mediterranean' and the second in 1978 "the Relations between Cyprus and Crete, ca. 2000-500 BC'), while cultural tourism focused mainly on excavations and the preservation of antiquities that would reinforce the above purpose.

Tourism and in that sense therefore antiquities, was a very important asset for the small, new-born Cypriot state because: a) they strengthened its economy b) they provided money for more excavations and c) they made Cyprus and its history known to the outside world.

So, while the concern of archaeological activity during the colonial period was merely to investigate the cultural past of yet another island (another colony of the British Empire) following the demands and beliefs of the discipline at that period (which was cultural history and emphasis on typologies), the concern of the Department of Antiquities during Independence was to establish Cyprus in the outside world, as a separate and distinctive state with its own history and culture. This difference in objectives is reflected quite clearly in the way Neolithic research was conducted on the island.

Indeed, after a period of great interest in the Neolithic material during the beginning of the century (1930s-1950s), (Dikaios 1953, Gjerstad *et al.* 1934), archaeological activities in that field declined (Held 1990:4). The policy after the independence which was directed towards the development of 'cultural tourism', made the role of early prehistoric research on the island very difficult because it did not seem to have much to offer as a contributor either to economic politics or to 'the cultural heritage and social consciousness of a small developing nation' (Held 1990:25). When it comes to national policies and Cultural Resource Management, Neolithic periods constitute a peripheral field for research, as their material cannot be of much help in the creation of the national consciousness of a country, and does not 'produce' the same amount of 'impressive for the public objects' as later periods. As a result, after the 60s there was not much interest for this period by the Department and the majority of Neolithic projects on the island were conducted by foreign teams (Peltenburg 1983, Todd 1987, Le Brun 1982, 1984, 1989, 1994). It is worth noting, however,

that the interest towards Neolithic period is now reviving, if one judges from the increasing number of new Neolithic projects that have started in the recent years (Karageorghis 1996).

Due to its colonial past and the influence of the increasing number of foreign projects working on the island, Cypriot archaeology has developed in close relation to western scholarship, starting, as described by Held (1990:7), from the 'Antiquarian-Descriptive period' (ca.1844-1925), and moving to the 'Historical-Classificatory period' (1925-1971) and lately the 'Procedural-Explanatory period' (1971-). Despite the latest calls for Cypriot archaeology to develop a conscious involvement in the current theoretical movements and to move from 'the reconstruction of culture history' to 'the explanation of cultural change' (Held 1990:6, also Knapp 1994:398), Cypriot archaeology, especially in the last couple of decades, has improved immensely and seems to be quite up to date with the general developments in the discipline.

Regarding spatial studies however, although in methodological terms, research has moved into an explicitly scientific realm, with extensive survey projects, intrasite spatial analysis, specialised studies on lithics, pottery, metallurgy, or multidisciplinary projects (see Held 1990), in theoretical terms, Neolithic studies have focused either on the traditional themes of archaeology, such as: 'the colonisation cycles', 'the diffusion of the Khirokitia culture' etc. or on more specific studies (e.g. intrasite spatial analysis) which are neither sufficiently detailed (they focus on structures rather than floors) nor holistic (lacking a wider context or a hypothesis) (see also Held 1990:9).

Held in his recent review of the current archaeological practices on the island regarding early prehistoric periods, highlighted the problems and made some suggestions:

> 'If early prehistoric archaeology is to survive and prosper as a discipline against the odds, a clean break with culture-historical orthodoxy, a unified research program, a discriminating selection of new projects, a reversal of the current particularizing trend in the interpretation of the material, and a policy of speedy publication are essential' (Held 1990:4)

Only the future can show if these suggestions will be followed up, but the new 'wave' of Neolithic excavations in the last years, and the most recent involvement of the Department of Antiquities in these (with the project at Nissia; see Karageorghis in press) can only be promising for the development of Neolithic research on the island and of archaeology in general.

4.3 Neolithic sites and the 'use' of domestic space

As already mentioned, Cyprus provides a remarkably rich and well preserved archaeological record (ill. 3), and it is in a sense ideal for synthetic studies. The present analysis reviews the available material from the Neolithic period, in an attempt to gather the evidence related to the use of domestic space on the island and investigate alternative ways of approaching spatial information both from a methodological and theoretical point of view. Due to the existence of at least three very

well preserved and extensively excavated sites on the island: Khirokitia - Vouni, Ayios Epiktitos - Vrysi, and Sotira - Teppes, the final reports of which are available to us (Dikaios 1953, Le Brun 1984, 1989, 1994, Peltenburg 1983, Dikaios 1961), in the last section of this chapter a more detailed analysis is attempted, focusing on the contextual information from these three particular sites, in order to investigate the potential and limits of a microscale analysis.

Despite the long debates about the chronological scheme in Cypriot prehistory (Coleman 1992, Stanley Price 1979, Knapp and Manning 1994) it seems that research is far from reaching a consensus on the subject. Better quality data and a re-evaluation of both traditional and radiocarbon dating criteria seem essential for a discussion of transitional eras and 'gaps' in a more convincing way. Having explained the role that chronology plays in the particular thesis (see chapter III), here I will mainly attempt to place the most recent revision based on calibrated radiocarbon dates (Knapp and Manning 1994: 379-390), into the general chronological frame I follow in the present thesis (Hours *et al.* 1994, see also ill. 2).

Neolithic period in Cyprus is usually divided into two phases: Aceramic (7000/6500-5800/5500 BC) and Ceramic (?5500-3700 BC). Recent research however, has dated the new site of Shillourokambos to c. 7.600-7500 BC (Guilaine *et al.* 1995:29), having as a result the extension of aceramic Neolithic occupation on the island at least 500 years back in time.

Although the recent increase in projects dealing with Neolithic period will undoubtedly improve even more our knowledge of the period, one has to keep in mind the peculiarity of the Neolithic record on the island, which by providing single period sites does not help to the establishment of chronological relationships among the various sites, and as a results 'reinforces' the creation of chronological gaps observed in the sequence of the period (ill. 2).

Aceramic Neolithic (ill.4-9, 14-22)

Although the number of excavated aceramic Neolithic sites in Cyprus is relatively small, the information available is quite significant due to the extensive excavation and detailed publication of the archaeological material. There are at least five sites which provide traceable architecture in this period: **Shillourokambos-Parekklisha** (Guilaine *et al.* 1995), **Khirokitia-Vounoi** (Le Brun 1984, 1989, 1994), **Kalavassos-Tenta** (Todd 1987), **Rizokarpaso-Cape Andreas-Kastros** (Le Brun 1981), **Limnitis-Petra tou Limniti** (Gjerstad *et al.* 1934) (ill. 4-9).

Although the published reports about most of the sites are incomplete (Tenta: second volume pending, Khirokitia and Shillourokambos: excavation in progress, Cape Andreas-Kastros and Ayios Epiktitos-Vrysi: excavations interrupted because of the Turkish invasion on the island in 1974), the material revealed is so rich, that allows significant insights into the nature of each particular site.

The evidence from **Shillourokampbos** should be mentioned first as it provides the earliest information from the period so far. Due to the fact that the project is fairly recent, the excavated area

is small and information about the layout of the settlement is restricted. The site itself, however, according to the survey, seems to cover up to 4 hectares (Guilaine *et al.* 1995:12). Stratigraphy has revealed two different types of structures which belong according to the excavator, to two different phases: an early pre-ceramic phase with a triangular post-hut (of a considerable size: the longest axis measures 20m.) and a late pre-ceramic Neolithic phase with a circular structure (4.5m in diameter) defined by (concentric?) stone walls. Although apart from scattered artefacts (chipped stone, and bones) there is no other information about the way the structures were used, the existence of an early phase is vary important because it indicates an earlier stage in the architectural tradition, which so far was represented only by the already fully developed settlements of Khirokitia and Tenta. The date and the nature of the earliest structure, indicate an architectural style which was different and preceded that of stone buildings.

Traces of post huts were evident on the island from previous excavations, from **Tenta** and **Limnitis** (Todd, 1987:28-29, and Gjestard *et al.* 1934: 1-12) but their evidence was far too fragmented and with uncertain dates. In the case of **Limnitis**, the flimsy, irregular shaped, post-hole huts had also no fixed features inside and they provided only scatters of artefacts.

In general there seems to be a considerable degree of variation during this period. Aceramic sites seem to favour in their majority strategic positions and where natural protection was not enough they were often surrounded by walls and ditches. As arrow-heads in the sites are rather rare, and there is not much evidence for violent distractions, the interpretation of these surrounding walls remains still unclear (Karageorghis in press). Dealing with this issue in **Khirokitia**, which presents the most monumental expression of these 'defence systems', Alain Le Brun suggested that the wall materialises the limit between built and unbuilt space and reflects the idea that built space is 'a privileged zone, enclosed and well defined' (Le Brun 1993:62,63).

Information about the layout of the settlements comes from three sites: **Cape Andreas-Kastros**, **Khirokitia** and **Tenta** and is in general terms similar, with curvilinear structures, made of mud brick (*pisé*) and stone, and a considerable number of open areas, lanes and passages (ill. 9,6-7,8). In two cases at least there is evidence for large mud-plastered open areas: one in **Cape Andreas-Kastros** and the other in **Khirokitia**. In the first case the vast outside plastered area seems to be the centre of everyday life as it contained a large number of domestic equipment in place (Le Brun 1993:67). In Khirokitia on the other hand, although open areas were usually used for a limited number of activities and mainly for the disposal of refuse, there is one case (in level C) in which a huge plastered area of $20m^2$ was revealed in excellent quality, was clean of any kind of material, and contained only a platform and no other domestic equipment (Le Brun 1993:68). This area according to the excavator, was reserved for non-domestic activities and spread beyond the limits of a single household. If one take into account the plan of the whole settlement in Khirokitia, it could be argued that the whole village was divided into similar kinds of 'districts', representing an intermediary level of organisation between the households and the village (Le Brun 1993:68-69).

It seems therefore that the use of outside space in the two sites was quite different. In **Cape Andreas-Kastros** planning seems to be less organised and the limits between built and unbuilt space are rather loose, while in **Khirokitia** both outside and inside space seem to have been ascribed specific and differing roles, with the majority of domestic activities taking place inside the structures and outside space being reserved for a variety of communal purposes (Le Brun 1981, 1984, 1993:68).

This pattern is also evident in the architecture of the structures themselves. **Cape Andreas-Kastros** is characterised by clusters of buildings, often forming two concentric walls with a central area and subsidiary structures around it (Le Brun 1981). In **Khirokitia** and **Tenta** however, although one also finds building complexes with concentric walls (Tenta: structure 14, Khirokitia: tholos IA), the majority of structures are free-standing. In these particular structures the internal space seems to be divided into a vertical axis (with internal piers and upper wooden floors), in contrast to the horizontal one (with annexes spreading around a central unit) observed in the case of **Cape Andreas -Kastros**.

Based on this information, the interpretation that each excavator has given for the social formation of these societies is also important and differs considerably from site to site. As already shown, in **Cape Andreas -Kastros** the majority of domestic activities were taking place outside, and although the division of space into a central unit with joined annexes (and the difference in the distribution of material: Le Brun 1981:118-124, fig.10-16), does provide ground for some kind of differentiation or division in activities, the lack of fixed features inside the structures, indicates that these were rather limited. In **Khirokitia** however, the picture is quite different and the excavator identifies several types of constructions with different function based on the variety in features and the distribution of the material in general (which is however still unpublished) (Le Brun 1993:67). According to his reconstruction, one can identify exclusively domestic constructions, constructions with a dominating activity, or constructions for several activities at once. Each of these constructions would constitute fragments 'of a larger domestic unit, the house'. Finally in **Tenta**, Ian Todd identified individual structures with intervening open areas, but he noted that groups of structures like the ones in Khirokitia, 'are not readily discernible at Tenta' (Todd 1987:181), although he does not exclude such a possibility completely (Todd 1987:32). According to his view, each single structure from Tenta with its upper floor, accommodated the needs for a family or a certain population unit. With regard to internal features on the site, it can be observed that they seem to occur less frequently here than in Khirokitia and internal hearths are rather rare (Todd 1987:182). Although a general review (Todd 1987:46, 49) points to a considerable repertoire of types of features both inside and outside structures, the lack of information about particular floors, makes difficult the identification of patterns.

Finally, one should refer to the case of what it seems to be a 'special' structure in **Tenta** (structure 14 complex, Todd 1987:32-33), which comprises a central circular stone building, a number of encircling ring walls, and small enclosed areas between them (ill. 8). The prominent

location of this complex as well as its considerable size have led the excavator to the suggestion of a structure of some special importance and non-domestic function (Todd 1987:33, 181). Similar evidence from Khirokitia is not available, although Tholos IA (Dikaios 1953) does bear structural resemblances. One has also to keep in mind that the top of the hill is not yet excavated in Khirokitia.

Human burials are evident in all three sites, but they present different characteristics. While in **Khirokitia** they are found below the floors of structures, and occasionally are associated with grave goods: stone vessels, chipped stone tools, shells etc. (Dikaios 1953, Le Brun 1984, 1989, 1994), in the other two sites, burials are found both inside and outside the structures and they rarely posses grave goods (Todd 1987:182-183, Le Brun 1981:27-29).

Depositional variability is very difficult to assess, due to the very limited available information about finds in the publications. If we compare the evidence from **Khirokitia** (Dikaios 1953) to that from **Cape Andreas - Kastros** (Le Brun 1981: fig. 13), it seems that in the former case more effort was put in keeping habitational areas clean of objects. Additional information will undoubtedly shed some light into this issue, especially as Alain Le Brun has recently claimed that the material in Khirokitia does show indications of different activities (Le Brun 1993: 67).

Domestic space in Aceramic Neolithic:

- The aceramic period on the island is represented by a considerable number of extensively excavated and well preserved sites. Despite the difficulties in dealing with incomplete publications, information about the settlements is abundant.
- The most characteristic feature of the period is probably variability, as sites seem to differ from each other both in form, and spatial arrangements. Considerable is also the difference in size among the settlements as well as the duration of occupation if one compares the deep stratigraphy and 'monumental' architecture from Khirokitia to the 'huts' from Cape Andears-Kastros. Whether this variability is the result of temporal, regional or functional differentiation, is still unclear.
- In general sites are located on prominent locations and they protect or define themselves with additional defence systems when natural protection is not enough. In Kastros open areas constitute the centre of domestic activities, with structures having no features at all, while in Khirokitia and Tenta the interior of the structures is equally fully equipped with domestic installations. Another indication of this different 'treatment of structures in Khirokitia and Tenta, is the existence of wall paintings in both settlements (Todd 1987, Le Brun 1994).
- In depositional terms the available information is unfortunately very limited, but it seems that in more 'organised' communities (Khirokitia), less artefacts were left behind, especially in relation to floors. Keeping in mind this pattern, it is significant to note the information from burials according to which grave goods are mainly attested in Khirokitia. Burials are not always related

to structures, but in the case of Khirokitia where they do, they seem to be accompanied by a greater variety of grave goods compared to the other sites.

Ceramic Neolithic (ill. 10-13, 14-22)

The evidence from Ceramic Neolithic is equally rich. Information about architecture comes from at least three sites **Ayios Epiktitos -Vrysi** (Peltenburg 1982), **Sotira - Teppes** (Dikaios 1961), **Klepini - Troulli** (Dikaios 1962) while two new projects, the sites of **Kantou-Koufovounos** (Mantzourani 1994) and **Paralimni-Nissia** (Karageorghis in press) seem to reveal promising results as well (ill. 10-13). From these sites the most extensively excavated and published are the two first.

The location of the settlements seems to be similar to the ones in the previous period, and there are some cases in which traces of defensive systems could be detected: Ayios Epiktitos-Vrysi, Klepini-Troulli and Paralimni-Nissia (Karageorghis in press). The layout of the settlements is available from two sites: **Vrysi** and **Sotira** (ill. 10,11), and it indicates a rather loose plan of irregular shaped buildings, divided by narrow lanes and passages. Information about open space is rather poor from **Sotira**, but in **Vrysi**, the evidence is considerable and it seems that apart from the deposition of refuse, open areas occasionally served domestic purposes as the presence of fireplaces indicates (Peltenburg 1983: 36-37, 53-54). Recently, evidence from the new excavated site at **Kantou** points to even greater activity outside, with the identification of a considerable number of open areas with fireplaces and pits (Mantzourani 1994:5,11). Judging from the similarities that Kantou has with Sotira it could be probably considered a good indicator of the information about open areas in the south of the island, we were missing so far.

In general structures are made of stone and *pisé* and are of irregular shapes, or squarish with rounded corners. They can be free-standing, but they also often form complexes of rooms. This layout, as well as, the lack of interior piers and the presence of numerous post-holes for the support of the roof, indicate absence of lofts and a rather horizontal expansion into groups, although Peltenburg, in view of the density of items on the floors, has also suggested that sleeping accommodation might have taken place 'at times' in lofts, on roofs, or outside (Peltenburg 1978:62).

The type of social units that these structures might represent has been discussed in the literature in length. Edgar Peltenburg in 1978 compared the two settlements (**Sotira** and **Vrysi**) for the first time, and suggested that 'houses were multipurpose units in which specific functions were closely integrated' (Peltenburg 1978:62) putting forward a rather uniform pattern of one family per house or in some cases extension of nuclear families. Stanley Price later, undertook a very detailed examination of the material from **Sotira** (Stanley Price 1979:79) and ruled out the possibility that each structure was housed by a nuclear family. He suggested instead that in view of the fact that the installations on the floors would indeed severely restrict the 'amount of space available to an occupant family', and that one could identify in structural terms distinct complexes consisting of one large structure (with most of the evidence for domestic activities) and several subsidiaries, the most

probable case was that these complexes represented households (Stanley Price 1979:79). A later, similarly detailed, analysis of the material in **Vrysi** however (Peltenburg 1985) pointed finally to a diverse pattern for the two sites, as Peltenburg indicated that at least for Vrysi his initial pattern seemed correct, as the structures here seemed to have no particular functions and suggested 'general habitation' (Peltenburg 1985:62), and single nuclear families (Peltenburg 1983:102). One has to keep in mind however, that neither of the two studies have examined the material at the level of individual floors (see below).

In contrast to the previous period, human burials have not been found inside these settlements so far.

Finally, depositional variability is quite remarkable in this period, and in comparison to the previous phase, it indicates a different behavioural pattern. The unusual concentration of artefacts associated to floors has led Peltenburg to the suggestion of the operation of 'ritual closure' or renewal ceremony' in order to explain the formation of the particular deposits (Peltenburg 1993:13).

Domestic space in Ceramic Neolithic:

- At least two sites (Vrysi, Sotira) from this period have been extensively excavated and have yielded considerable information about structures.
- Structures during this period seem to constitute the centre of domestic activities although a limited number of activities (cooking? if one judges from the firepits) might also take place outside.
- The planning of the settlements is rather loose and the variety in structural forms seems to indicate a variety in the role of structures in terms of function as well. Segmentation in architecture and probably in tasks is also evident but it is very difficult to distinguish between functional and social differentiation.
- In depositional terms the information is remarkably rich and provides a unique opportunity for the identification of the way space was used among structures (see contextual analysis below).

4.4 Attempts for a contextual approach: Structural and depositional variability in Khirokitia, Sotira and Vrysi: a case study.

The aim of this section is to examine in some detail the structural and depositional evidence from three sites on the island for which detailed stratigraphic information is available, and investigate the structural and behavioural changes that took place within and between structures. The analysis concentrates on occupation layers (floors) and the features and finds associated with them. The sites under examination are: a) **Khirokitia - Vouni** (Dikaios 1953; Le Brun 1984, 1989, 1994) from Aceramic Neolithic (ill. 6-7) and b) **Sotira-Teppes** (Dikaios 1961) and **Ayios Epiktitos - Vrysi** (Peltenburg 1983) from Ceramic Neolithic (ill. 10-11).

4.4.1 Khirokitia - Vouni (Aceramic Neolithic)

The site of Khirokitia is located inland from the southern coast of the island at about 6 km. and is situated on the slopes of a hill surrounded from its three sides by Maroni river (ill. 6). It was initially excavated between 1936-46 by P. Dikaios and the Department of Antiquities (Dikaios 1953), while recently (since 1977) a new project of excavations has started, by a French team with director Alain Le Brun and is still in progress (Le Brun 1984, 1989, 1994).

This case in which one site is excavated by different projects is not unusual in archaeological practice. What is unusual however, is the fact that the quality of the publication and the extend of the excavation of both projects, make possible some comparable results. It has to be said that in relation to the particular site, general comparisons between the two publications could not be made, and for this reason, in the following analysis the information from the two projects is examined separately. Furthermore, it should be noted that information from older publications is usually considered 'out-dated' or simply 'incorrect', and indeed, as it will become obvious from the following, both of these arguments could apply to Dikaios' publication. However, the exceptionally good preservation of the material remains on the site, as well as the recording of finds and features according to individual floors by Dikaios, make possible the attempt to review the information from both projects, 'double-checking' plausible patterns, and investigating in this way the difference between patterns that derive from the archaeological record and ones that are the product of specific archaeological practices.

Dikaios (1953) identified in Khirokitia three phases : I, II, III, from bedrock to surface respectively. In his reconstruction of the site the settlement was cut by a main road and the two sectors on either sides (east and west) were meant to be contemporary. Le Brun later proved, by revealing a gateway, that the 'road' was in fact a kind of 'defensive' wall (Le Brun 1994:15-26), which was reinforced by a second one as the settlement expanded to the west (ill. 7). Le Brun's reconstruction therefore is also based on the two sectors (east-west), only that now there is a temporal difference between them, according to which the west sector is later than the east.

In the following section, analysis starts with the most recent publication, that of Le Brun, who having located the gate of the 'defensive' wall (Le Brun 1994:33-47) established a more reliable stratigraphic sequence on the settlement.

• *Latest excavation (Le Brun 1984, 1989, 1994)*

As already mentioned, the site is divided into two sectors by a 'defensive' wall: the east which represents the initial occupation and the west which expands outside the first wall and represents a later phase. In the east sector there are six phases identified: G/F, E, D, C, B, A, while in the west there are four: IV, III, II, I. According to the stratigraphic sequence established by the director (Le Brun 1994:15) phase IV in the west sector, is either contemporary to or have succeeded phase A in the east (ill.7).

In the following analysis the material is examined both by phase and sector. Information concerning objects is not yet available in the publication, but the extensive number of structures and floors which have been revealed, makes possible a first assessment of the variability at least in terms of fixed features.

The nature of the sample and the layout of the settlement:

One of the main characteristics of the archaeological record in Khirokitia is the fact that stratigraphy is very deep and due to the monumentality of the architecture, access to the earliest phases of the settlement has been very difficult. Furthermore, with the project being still in progress, research has not reached the earliest deposits yet, and as a result bedrock has been revealed in very few cases: one in the east sector and two in the west. Based on this 'incomplete' picture, our sample indicates a considerable intensification of construction in phases C and B for the east sector, and III, II, and I for the west (ill. 23-24).

Apart from the problem to access earlier phases, mentioned above, there is also a considerable degree of disturbance which is caused by the pits and graves which constitute common features on the floors of the site. Despite the difficulties however, there still remains a significant number of undisturbed and complete units for which analysis is possible. In the following analysis there are examined: 12 units/floors from phases C and B in the east sector, and 20 from phases III, II and I in the west (ill. 25-26).

Examination of the material by phase (Level I of analysis):

The distribution of units according to their *size* and *type of segmentation* (see app. I) in each phase indicates a decrease in the range of size and in the variety of segmentation types for *east* sector as we move into later phases, while in the *west* sector at least the size of structures, seems to follow the reverse pattern (ill. 27). As far as types of segmentation are concerned, their range does seem to decrease in later periods, and one should note that there are no type A' structures (str. which belong to a wider unit) anymore, while type Ca (with pillars) structures soon disappear.

A more detailed analysis of the evidence in the *east sector* (ill. 28), indicates a considerable difference between phase C and B, although differences in the size of the samples should be kept in mind. *Phase C* displays a large variety in size and segmentation types among its units, while *phase B* contains mainly structures of a smaller size (only exception S. 122) and without partitions (type A). In general there seems to be a considerable number of structures, which change segmentation type and size from phase to phase and floor to floor. Furthermore, if one follows the changes in internal partitions throughout all phases (e.g. S. 136, S.122, S. 125 and S.126), it is evident that when structures reach their final phase, they have no internal partitions at all. Structure 122 is quite exceptional as it was occupied for a long period (at least three phases), and went through four

different types of segmentation : from type Ca (with pillars), to Ca/Ba (with pillars and partition wall), to Ba (with partition wall), and finally to A (without partitions).

As far as the *west sector*is concerned (ill. 29), segmentation types seem to spread more evenly, and while there seems to be no significant difference between the phases, the range and variability in size seems to increase as we move into later phases. This tendency for larger structures is identified in two examples from phase I (str. 96, and str. 112) and is related to structures without any partitions (type A). Throughout the phases, spatial arrangements within structures change in considerable rates (five structures in total: S. 85, 94, 105, 102, 106), and similarly to the east sector, they also seem to move towards less segmented forms. Exceptional case in this sector is structure 85 which has been altered at least five times (from type Ba: partition wall, to Bb: low wall/ridge, to A: without partition, to Ba and finally to A again).

Finally there is indication that no real connection exists between the types of segmentation and the size of structures, as it is evident that in both sectors one can find large structures with no partitions at all (type A), and very small ones with partitioning walls (type Ba), enclosed areas (types Bc) and 'pillars' (type Ca).

Turning to the distribution of features now per phase, the evidence indicates rather low rates (ill. 30, see also app. III). The analysis refers to the number of features per floor in each phase. According to the information available, the majority of features per floor in the east sector reaches its peak in phase D and after that decreases steadily. However, although every effort was made to 'secure' the results by dividing the number of features with the number of floors in each phase, in order to get a reliable average, cases like the above highlight the weaknesses of our sample. Phase D is represented by only *one* floor, which although it has indeed an unusual number of features, it could not be considered representative of the whole phase. Typological variability does bring a balance in that respect however, as it indicates a smoother pattern, according to which the types of features increase gradually from phase III, and they fall suddenly in the last phase (phase I).

In the west, the number of features is at its highest level from the beginning (phase III), and although it decreases gradually, it does not seem to differ considerably between the phases. In typological terms, rates seem to retain considerably high values all along .

Comparing the two sectors, the number of features in the west sector seems to be reduced but in typological terms the two sectors are similar.

Finally, a more detailed examination of the three main types of features ('hearths', 'platforms' and 'fixed containers')(ill. 31-32), does not seem to indicate great differences, while the distribution of posts and pits and graves increases in periods of intensified habitation (phase C in east sector, and phase II in west sector) (ill. 33). In particular, the number of graves in the west sector seems to increase considerably in the last phase (phase I).

The results from the above analysis, indicate that :

- Structures vary considerably both in sizes and internal partitions and change constantly from floor to floor, indicating in this way a lack of standardisation in the role that structures were called upon to play and probably a variety in their use. They provide therefore, in the most vivid way, a picture of the dynamic processes which take place in the 'life time' of a settlement.
- The west sector seems 'poorer' in terms of numbers of features compared to the east, but in terms of types, that difference disappears and the west is 'picking up' from where the east had stopped.

Examination of the material by structure (Level II of analysis):

As already mentioned, detailed information about the variability between structures can only come from two phases in the east sector : phase C and B, and three in the west: phase III, II and I.

Phase C is represented by 3 structures (4 floors), from which one (S.118/fl.7) is very small (2.40 m^2), has no partitions at all (type A) and has one only feature: a hearth (ill.34). The other two (S. 117/fl.5,6; S.122/ fl. 10) are much larger, they both have pillars and another additional partition, and they contain hearths and platforms, while in the case of fl.5, a fixed container as well. Structure 122 also contains a number of features which are lacking from the other structures, such as an unusually big number of posts, two pits and two graves (see app. IV and V).

Phase B provides a larger sample, with 4 structures and 8 floors (ill. 35). Sizes and segmentation types are quite variable here, and they seem to change with every single floor. What is worthwhile noticing however is that when a segmentation type is changing on one floor then the number and type of features is usually also modified (see S.125/ fl. 26, 27, 28; S.126/ fl. 29, 30). Structure 131 (unit 35) is one of the very few examples of a small unit with a pillar (type Ca), and contains only a hearth. The majority of the rest of the units seem to have no partitions (type A) but now their size varies considerably in comparison to the previous phase. Finally it is worth noting the difference between structures 125 and 126: in the first the addition of a features is related to the addition of partitions, while in the second happens exactly the reverse.

Phase III in the west sector, is represented by 4 structures and 8 floors (ill. 36). There seems to be a uniformity in the types of segmentation in this phase (all with a partition wall/ type Ba) with the only exception the last floor of S. 94 where there is no partition at all. The relation between size, segmentation type and features does not indicate any particular pattern. S. 94, for example, with three floors (9, 10, 11) of a medium size seems to concentrate the majority of features, while S. 87 (fl. 5, 6) of a quite larger size, contains much less. This last structure is also the only one that in its first floor (fl. 5) did not contain a hearth.

Phase II has 5 structures and 8 floors (ill. 37). The largest structure (S. 89 /fl. 30) contains only one platform, while one of the smallest (S. 102 / fl. 35, 36, 37) seems to change constantly furnishing: in the beginning it contained only one platform, while in its second floor (36) it had one hearth, an unusual number of posts and one pit (see app. IV and V) and later a hearth and a

platform. S. 84 also indicates a significant amount of change, having two platforms in its first floor (unit 24) and in its second (unit 25) none. Considerable is also the number of floors (S.89/ fl.30, S. 94/fl. 32, S. 102/ fl. 35) which had no other features apart from a platform, and varied both in internal partitions and in size.

Finally, *phase I* is represented by four structures and five floors (ill.38). The smallest structure (S.83), has no partitions at all and contains no features. The rest of the floors are of a similar size and they contain similar numbers and types of features, with the exception of S. 95 (fl. 46) which had only one platform.

It is therefore evident, that the variability observed before between the size and segmentation of structures, applies also in the way features were distributed into the buildings and it seems that there is no apparent relation between size, segmentation and features within the structures.

In summarising therefore, the following points could be made:

- Although it is difficult to identify with certainty the particular 'function' of a floor, the great variety in size, segmentation types and features in the structures of the site, seems to indicate equal variety in the role they were playing in everyday life.
- Apart from the variability between structures which is also suggested by the excavator (see above), one can see considerable variability within the structures themselves from floor to floor. Although therefore segmentation does exist from the very early stages in the settlement, it does not relate to size or features and it is not standardised.

• *Initial excavation (Dikaios 1953)*

Dikaios identified three main periods in Khirokitia : I, II, III, starting from the bedrock to the surface respectively, considering the two sectors (east and west) contemporary (ill.6). However, as proved by Le Brun (see above) west sector succeeded the east, and it is therefore later. Based on this latest reconstruction of the site, the following analysis had to follow a rather unusual route, and although it is based in Dikaios' publication and follows his tripartite division, it separates the evidence and it examines the units according to sector.

Due to the lack of association between the stratigraphic sequences of the two separate projects, such an analysis can only be considered 'tentative'. However, it is worthwhile for two reasons: a) because in view of the latest results (Le Brun) an assessment of the material following Dikaios' chronological division, would be simply wrong, and b) because it would be useful to attempt a test on the already existent patterns (from Le Brun's publication), and show if possible the degree up to which the record can be transformed by different archaeological approaches.

The nature of the sample and the layout of the settlement:

The distribution of units according to phase and sector indicates intensification of construction for the last two phases in the east sector, and for the two first in the west (a pattern which is in complete harmony with the latest reconstruction by Le Brun) (ill. 39-40). What it is also obvious, is the attempt of the excavator to reach the bedrock in as many of the structures as possible and as a result the deposits here have been excavated to much deeper level than in the previous project and in that sense provide a more 'complete' picture of how the settlement spread. Unfortunately, the monumentality of the architecture did not allow much access to the earlier deposits, and consequently, phase I has been very little investigated, while the walls of the structures were hardly ever reached. Even so, it is clear that the early phase in the west sector has been more extensively and intensively occupied, compared to the same one in the east (ill. 41-42).

As far as the degree of preservation and disturbance is concerned the problems are similar to the once faced by the previous project (difficult access to early deposits, later cuttings by pits and graves) and the results therefore are equally limited. The majority of complete and undisturbed units derives from the second phase (phase II), in which 26 units are available in total: 7 in the east sector and 19 in the west.

Examination of the material by phase (Level I of analysis):

Due to differences in the sample, results can only be tentative when we compare phases but they are indicative of the picture we have got available so far. According to this (ill. 43), segmentation types do increase as we move towards later phases in the east sector, while in the west their range is quite limited in the beginning and becomes much wider in phase II. The size of structures also fluctuates: in the east there is a decrease as we move from phase II to phase III, while in the west, its range is low in the beginning, it becomes wider in phase II and it is low again in phase III.

A closer examination of the relation between size and segmentation types indicates the following pattern (ill. 44-47):

a) in the east sector: The information from phase I is fragmentary (ill. 44) but the distribution of units in phase II (ill. 45) shows a considerable number of segmentation types which do not seem to be related to a particular size. The majority of units belong to type A of segmentation, without any partitions and their size varies from relatively small (5.00 m^2) to considerably big (20.90 m^2) structures. In structures with more than one units, the tendency is to move from segmented into more simple forms with less partitions (BXXII (I): from type Ba:partition wall, to type A: without partition, and BXXVII(I): from type A'/Ca: with pillars and part of a complex, to type A': part of a complex and no other partition). The last phase (phase III, ill. 47) is also quite informative with at least five different types of segmentation identified (A: no partition, A': part of a complex, Ba: with partition wall, Ca: with pillars, A'/Ba: with partition wall and part of a complex) and a considerable range in size (3.00 -14.60 m^2).

b) in the west sector: phase I (ill. 44) consists of 10 units from which the majority has no partitions (type A) and relatively small size (c. 5.00 m^2). There is only one exception with structures X (III) which was at some point segmented (type B/Bb: with a partition wall and a ridge) but later took a simpler form (type A: without partitions). This particular structure is the only one during this phase with a considerable size (11.20 m^2) and it also seems to indicate a relationship between size and segmentation type, as the enlargement of the building was followed by the construction of two partitions. Phase II (ill. 46) provides a considerably bigger sample which is characterised in its majority by units without partitions (type A). In this phase the relation between size and segmentation types seems to be more clear, as one could observe that type Ca of segmentation (with pillars) comprises the largest units, type A (no partitions) covers a wide range in size (1.50 - 17.10 m^2) and the rest of the types (A': part of a complex, Ba: with a partition wall, and Bc: an enclosed area) are characterised mainly by smaller structures. The last phase (phase III, ill. 47) in this sector is quite poor (3 units), and contains relatively small units (5.10 - 7.40 m^2) with no partitions at all (type A). The large size of the sample also allows a further observation, which refers to the changes within structures and the fact that some structures seem to change constantly (str. BXLVII(I) in phase II), while others remain the same (e.g. str. BXV(II)) throughout their 'life'.

With regard to the distribution of features now (ill. 48, see also app.III), their number per floor decreases in both sectors from the earliest phase to the later. Typologically however we have a pattern already known from the previous analysis (based on Le Brun's publication), in which east sector displays higher values in its last two phases and west sector in its two earliest. Furthermore, comparison between the two sectors shows that the over all typological variability in the west sector is much higher than that in the east.

A closer look into the three main types of features ('hearths', 'platforms', and 'fixed containers') shows that structures in the east sector lack 'fixed containers', while the last phase (phase III) in the west sector contained only hearths. In general, the highest degree of typological variability is identified in phase II of the west sector (ill. 49-50).

As far as the other features are concerned (ill. 51), there seems to be a high concentration of post in the last phase of the east sector, while in the west there is an increase in the number of graves associated with floors, which also coincides with the pattern from Le Brun's publication (see above).

The distribution of artefacts on the site indicates a similar pattern (ill. 52-53). According to this, in depositional terms (finds per floor /unit) the last phase (phase III) in the east sector is slightly 'richer' from the others in the west, while in typological terms the west sector displays much higher values. Additionally one should note the difference between depositional variability and typological variability among phases II and III in the east sector: while the actual number of finds seems to

increase in phase III, in typological terms happens the reverse, and phase II appears much 'richer' compared to phase III. Finally, the idea that the two sectors were successively occupied seems to be supported also by this piece of evidence, as long as there does seem to be a higher concentration and a 'shift' of finds from the last phases of the east sector to the earliest on the west. The same applies for the distribution of other unspecified or broken objects. Again one should notice that the actual rate (real number) of finds is quite low.

Reviewing the patterns identified so far, the following points should be made:

- Apart from the variety and the large scale in the sizes of structures, there seems to be a relation between size and segmentation types. Furthermore, there are considerable differences in the way structures develop and change during their 'life'. Could 'changing' and 'unchanging' structures (in terms of segmentation) indicate the difference between 'settled' and 'unsettled' households, for example? Could the relation between size and segmentation types reflect intensification of domestic activities and increase in the number of inhabitants? The answer to such questions would require further analysis of the features and finds associated to each floor, but the pattern itself is an additional indication of the potential that microscale analysis can offer to archaeology.
- Similar observations could be made for the rest of the evidence: the number of features for example which decrease by phase, could be an indication of the increasing fragmentation of 'households' for example, while the fluctuation in typological variability in the east sector could indicate a 'stagnation' of the society in phase III and its revitalisation with the expansion to the west which was followed by an increase in the types of artefacts used. Despite the promising 'story lines' than one can create and follow, the limits of the record should not be underestimated and it should be kept in mind that the evidence is indeed very fragmented. The potential however, of such a more detailed approach to the material is obvious, and it is this potential most of all that the present thesis wishes to stress.

Examination of the material by structure (Level II of analysis):

Information for this analysis, derives mainly from the middle phase (phase II) for both sectors but there are small samples from the other phases as well: in the east sector phase III is represented by two units (units 101, 102), while in the west there is one unit from phase I (unit 7), and one from phase III (105). The following description is divided by sector.

In the *east sector* there is no evidence from the earliest phase (phase I), but phase II is represented by 7 units (5 structures) available for analysis (ill. 55-56, see also app. IV,V). According to these, there seems to be no relation between size and segmentation type between the particular floors. Building BXXII(II) for example which is represented by two floors, retains the same type of segmentation (type Ba/partition wall) although in its second floor its size has doubled. In building BXXVII(I) on the other hand, the reverse is observed: two floors with different segmentation types

are having exactly the same size. The number of features and finds within these structures is quite limited. What seems characteristic is that each unit contains only one single type of feature, either a hearth (unit 70) or a platform (units 80, 83, 85), while there is a considerable number of completely empty units (units 44, 71, 82). Unit 70 (BXXII(II)), contains the majority of finds (n=6) and is the only unit with a hearth.

Phase III in the same sector is represented by structure BVII(I) (units 101, 102) which contains two floors, one with just a fireplace (unit 101) and a second one (unit 102) with more features: a hearth, a paving, 9 posts and 1 pit).

West sector consists of 19 units (9 structures) available for analysis (ill. 57-59). From the nineteen floors only two have a considerable size (units 16, 69) and they both belong to type Ca of segmentation (with pillars). Though both have graves, they do not contain a great variety of features, the first (unit 16) has only two hearths, while the second (unit 69) has only 3 platforms. Deposition of finds is in general very poor for all the floors. Instructive however, is the variability of features and their association to structures. Building BIII(I) of a relatively small size (4.50 m^2) is a characteristic example: initially (units 24, 25) it has no features at all, while later (unit 27) it changes segmentation type (from type A: without partitions, to type Bc: with an enclosed area) and it accommodates one hearth, a platform, three graves and a pit. Soon after it is furnished with the largest number of platforms (n=6) in the sample and has no partitions at all, while at its very last phase (unit 30) it becomes even smaller and has only one hearth.

The last phase (phase III) in the west sector, is only represented by structure BX (I) (unit 105) which has no partitions at all, and no other features apart from one grave.

- The role and the use of structures therefore seems to vary here as well, following the pattern identified by the previous project. The variety in size, segmentation types and distribution of features within and between structures, supports the argument for the fragmentation of 'households' suggested by Le Brun (1993).

In summarising, the evidence from both publications seem to coincide. There does seem to be a shift from the east to the west both in depositional and typological terms and there is also a similar amount of segmentation in the structures. The variety in the relation between size, segmentation types and number of features within a structure indicates a rather 'loose' and less 'standardised' spatial arrangement for the settlement which might reflect a more 'communal based' rather than 'family based' society. Finally some additional observations could be made with regard to the patterns between north (Le Brun's project) and south (Dikaios' project), as for example the difference in the distribution of certain segmentation types (see above). The inability to relate stratigraphicaly the two projects however, does not allow further analysis in that respect.

As far as the methodological 'experiment' which we attempted is concerned, by dividing the material from Dikaios' publication according to the results from a later research (Le Brun), we hope we managed up to a degree at least to show, that one can distinguish between different archaeological approaches on one hand, and the actual information provided by the archaeological record on the other. The information pending from Le Brun's excavation regarding the artefacts, could show further similarities.

4.4.2 Sotira -Teppes (Ceramic Neolithic)

The settlement of Sotira - Teppes is located on a hill some 6.5 km inland from the south coast of the island, to the west of Khirokitia (ill. 3). It was excavated in the 1950s by P. Dikaios and it was finally published in 1961. The aim of the project was to reveal the largest part of the settlement on the top of the hill, and to excavate all structures up to bedrock. Although however, the shallow stratigraphy of the site helped a lot to the completion of these objectives, it was at the same time a negative factor because it exposed the site to erosion.

Dikaios identified four chronological phases (I-IV), and according to his reconstruction the occupation of the site started at the top of the hill (phase I) and then expanded towards the slopes (ill.10). Phase III ends with the distraction of the settlement by an earthquake (Dikaios 1961: 208), which is followed by a phase of gradual abandonment of the site (phase IV) and the construction of a retaining wall at the top of the hill, which destroyed many of the structures of earlier phases.

In spite of the very careful recording and presentation of the material in the publication, attention should be drawn to the fact, that the description of the stratigraphic sequences is rather problematic: a) the floors in the last phase are not separately mentioned but they are described along with the previous phase and it is up to the reader to make the specific distinction, b) many floors in phase III are underlain by occupational layers which do not seem to be attributed in any particular phase, and c) there are problems in the comparison between sections and plan.

For these reasons Stanley - Price attempted in 1979 (Stanley-Price 1979) a re-examination of the stratigraphic sequences identified by Dikaios, suggesting a different layout for the settlement (extensive occupation on the plateau already from phase I) and dividing the occupation into three periods (instead of four).

In the present analysis, I follow Dikaios' periodisation, because, despite the mistakes that one can certainly identify in the text (publication) and should be aware of, the excavator's assessment of the stratigraphic sequences, constitutes the first and only 'direct reading' from the archaeological record and in that sense it must be the most reliable (see also chapter III).

The nature of the sample and the settlement layout:

Following the division of phases that the excavator identified, there seems to be a gradual movement from the top of the hill to the slopes (ill. 10). Furthermore, as the distribution of the floors

in the available sample indicates it appears to be a significant difference between the phases and the way that the settlement has expanded (ill. 60). While for example in phase I and II there is a 'vertical' expansion, with the majority of structures comprising two floors, in the rest two phases (Phase III and Phase IV) expansion is mainly 'horizontal' and structures are characterised in their majority by single floors.

Stanley Price's model concerning the layout of the settlement needs some further attention. According to his interpretation occupation started from 'large, free-standing structures' in phase I to which gradually were added smaller, subsidiary buildings (Stanley Price 1979:65). Following this interpretation however, and although the re-evaluation of the stratigraphic sequences could be at some point convincing, there still remains the problem of the 'complex' of at least four 'rooms' at the top of the hill (structures: 39, 38, 29, 40), which is attributed to the earliest period and is remarkably different from all the other 'large, free-standing structures' which characterise the particular phase.

With regard to the nature of the archaeological record now, stratigraphy was quite shallow and structures were not built directly on top of each other, a factor which made underlying layers easily accessible. A disadvantage of shallow stratigraphy is the exposure of the site to erosion, which has become evident by the fact that the majority of the units in the last phase (phase IV) seem to be disturbed and provide limited information. However, in this record there are no pits or graves associated to floors, and at least on that respect the units are less disturbed.

Sotira constitutes a very good sample for the study of spatial associations, providing 56 buildings and 67 floors for analysis (ill.61). As the relevant information indicates the majority of undisturbed and completely excavated units belong to phase II and III: 9 from the first and 11 from the second. Phase I is not very well preserved (only two units: 1, 2), because the structures at the top of the hill are cut by the retaining wall which was constructed in the last phase. Finally, phase IV is heavily eroded (only three units: 52, 62, 67).

Examination of material by phase (Level I of analysis):

A first assessment of the size of structures and the types of segmentation they comprise, indicates an increase in their range as we move into later periods (ill.62). Phase III displays the largest variety in size (although one should keep in mind the differences in the size of samples for each phase). With regard to the variety in segmentation types, considerable partitioning exist already from the earliest phase (phase I), while free-standing structures with no partitions (type A) appear in the settlement from phase II.

Detailed examination of the relation between the size of structures and the segmentation types (ill. 63-66), points to some further correlations:

a) the segmentation type of the floors within each structures does not appear to change frequently. The only exception comes from phase I, in which Building 38 from a more 'complex' form (type

Bc/A':part of a complex and with an enclosed area) moves into a simpler (type A':part of a complex).

b) the relation between size and segmentation is considerable. Structures with internal partitions (types Ba: with partition wall, Bc: with an enclosed area) have in their majority a significant size, while structures belonging to type A' (parts of a wider unit) vary considerably from small to large indicating probably in this way the differing roles that they had to play, and

c) the difference in the size and distribution of free standing structures without partitions. These have a considerable size in phases II and IV, while in phase III they are much fewer and of a smaller size.

The distribution of features among the phases (ill. 67-68) indicates an increase both in numbers and types from phase I to II. Phase IV despite its low number of features, indicates similar typological variability with the two previous phases (II and III)(see also app. III).

A more detailed analysis of the three main categories of features in each phase ('hearths', 'platforms' and 'fixed containers')(ill. 69-70) clarifies the previous pattern and though it reinforces the typological uniformity of features in the last three phases (II, III, IV), it reveals a difference in the number of features between phases II and III, where the number of 'platforms' seems to be larger than that of 'hearths' (following the reverse pattern from phases I and IV). Finally, attention should be drawn to the lack of fixed containers during the earliest phase (Phase I) which however might be due to the size and the state of preservation of the available sample. If real, it could be an indicator of the first transitional period for the settlers in which life has not found yet its standard every day rhythm. In view of the fact that post in this site were identified as supporting the roof, the increasing number of posts as we move into the later phases must be related to the increasing size of structures.

The distribution of finds indicates a rather uniform pattern both in depositional and typological terms (ill. 71-72). Phase I is very poor in finds, while phase II displays the highest values in all three categories of objects ('implements, other finds, and vessels). After phase II there is a gradual decrease in the number of finds which continues until the end of occupation in phase IV. Typological variability follows exactly the same pattern.

A similar pattern is displayed in the distribution of other unspecified objects which also points to phase II as the phase with the highest 'disposal' values for this particular kind of objects, although the rate is considerably low (ill. 73). Finally, the distribution of sherds seems to indicate exactly the opposite pattern with a steady increase of the numbers of sherds found associated to floors as we move into later phases (ill. 74)

In summarising the following points could be made:

- The existence of many type A' structures reinforces the idea that structures were forming clusters and also seems to support the argument that the different size of associated structures might indicate differences in function.

- The decrease in the number of hearths in relation to platforms in phases II and III could indicate an even greater concentration of activities inside the structures while at the same time reflect the restriction of the use of hearths into better defined and special areas.
- The degree of segmentation (both in size and structural arrangements) in Sotira is quite considerable right from the first stages in the development of the settlement, while the introduction of free standing structures in phase II poses the question of a plausible change in the way that the 'household' was conceived and the form and function that had to undertake (but see Stanley Price 1979).
- Furthermore, is there a particular relation in the deposition of finds and sherds on the site? The pattern is quite clear: the number of finds decreases as we move to later phases, while the number of sherds increases. Do these two different types of 'finds' represent different types of disposal behaviour? Which is intentional and which not? Furthermore, could it be possible that the reason for the decrease in the number of finds was a decrease in resources and the need to use and 'recycle' older objects?
- In general there seems to be a great difference between phase I and II both in depositional and typological terms for features and finds. After phase II the number of feature and finds decreases but up until the latest phase typological variability remains considerable. Furthermore, it seems quite clear that the increasing structural segmentation in the settlement is followed by an increase and stability in the distribution of the types of features although with regards to finds there is a decrease both in depositional and typological terms, which is probably the result of a change in disposal habits and intensification of habitation.

Examination of material by structure (Level II of analysis):

Phase I

The information available from this phase comes unfortunately only from one structure (B36), a fact that does not allow any comparison at an intra site level (app. IV, V). The state of preservation of the units in this phase is quite poor and from the two examples available (units 1 and 2) the only indication is some difference in internal arrangements, which might reflect difference in their domestic roles: in the first unit there was a hearth and a platform while in the second only a fireplace.

Phase II (ill.75-78)

There are 5 buildings available from this phase which provide 9 units for analysis (an average of two floors per building). In their majority they have a considerable size and their types of segmentation are amongst the simplest (types A: without partitions, A': part of a complex, and Bc: with an enclosed area).

The distribution of features points to several types of buildings: Buildings which lack a well built hearth, are of a relatively small size and belong to wider units (e.g. B6 and B(17)), buildings with a large size and many features (e.g. B5, B7) and finally buildings with a limited number of features (B1, B3) and a considerable size.

The fact that the largest structures seem to concentrate the highest number of finds and features (see for example: units 10, 16, 18, 19.20) seems to support Stanley Price hypothesis that these structures 'housed' the centre of activities (Stanley Price 1979:79). Attention however, should be drawn to the depositional variability of finds because the two units which contain the highest numbers in finds (unit 16 and 19) also contain the highest numbers in sherds. The pattern becomes even more complicated when one bears in mind that structure B7 (unit 19) has yielded *in situ* finds, while structure B3 (unit 16) has not, and their assemblages might be therefore the results of different formation processes (app. V, table 1). Again the role of sherds is unclear, but in view of the fact that whole pots are usually put together in the publication, this particular scatter of sherds might even indicate refuse. Further detailed analysis could probably shed some light on this and similar problems, but it is important to stress here the significance of similar types of evidence (as for example animal bones) for the better understanding of the formation processes effecting occupational layers.

Phase III (ill.79-82)

Phase III provides an even larger sample, with 10 buildings and a total of 11 units for analysis. Structures here are represented in their majority by one floor, a fact that could give some sense of contemporanouity in the sample.

The distribution of features is not uniform. There are structures (B17, B31) with no features at all, which have different types of segmentation (A': part of a complex, Ba/A': with a partition wall and part of a complex) and a relatively small size (7.50, 7.40 m^2). Additionally, the existence of related units seems to provide indications of different activities: units 30 and 31 (B12 and 16) for example, comprise two adjoining structures from which the biggest contains a fireplace (not a hearth), 3 slabs (seats?) and a bin, while the smallest contains just a hearth and a considerable number of sherds.

There is only one unit (unit 33/B14) which contains two hearths (and one platform) and this is the unit that has yielded the majority of finds, along with a great number of chipped stones (16 flakes, 5 blades). In contrast, the rest of the units (maybe with the exception of unit 29) have yielded much less finds. Unfortunately lack of evidence about the link with the surrounding units and about the location of entrances, does not allow speculation about the relation of unit 33 to neighbouring units. Any indication about their function can only derive therefore from the fact that they are much smaller and without many features. The distribution of miscellaneous objects and sherds coincides

with units that contain high concentrations of finds and have a large size, and supports again the idea of large units being the centre of activities.

Phase IV

This last phase is represented by a very small sample (three buildings, three floors)(see app. IV,V). Based on the distribution of the features and the nature of the structures themselves, there seems to be again a difference between small structures that are not free standing and do probably belong to a unit, which contain mainly hearths (unit 52/B6, unit 67/B30), and larger once (unit 62/B14), which in structural terms seem more autonomous, and contain a variety of features (hearths, platforms, fixed containers).

In summarising the results from Sotira, several points could be stressed:

- The variation in size, segmentation type and features between the structures is considerable and points to a pattern of differentiation in the role of structures and fragmentation in the 'households'. It should be noted however, that in comparison to Khirokitia, Sotira provides a more 'relaxed' architectural order, judging from the considerable variability in the house forms.
- Finally, there is also great variety in depositional patterns. Although the number of finds associated with floors is considerable, not all structures contain equally high rates. Furthermore, there seems to be a relation between the discard of finds and sherds as high concentrations of objects seem to be followed by high concentration of sherds.

4.4.3 Ayios Epiktitos Vrysi (Ceramic Neolithic)

Ayios- Epiktitos - Vrysi is located at the top of a headland which is part of a flat ridge, extending from the foothills of the Kyrenia Mts. to the north coast of the island (ill. 3). The headland is squarish in shape and is divided into a number of deep hollows and ridges (most probably of natural origin; Peltenburg 1983:11). Due to this morphology the excavated area is also divided, by a central ridge, into two sectors : the north and the south. (ill.11)

Despite the uniquely deep stratigraphy that such a formation of hollows and ridges offers (in some cases a 7m deep culture-deposit; Peltenburg 1983:1,9), it makes very difficult the recovery of intervening/relational stratigraphy. As a result, the relationship between the two sectors had to be established mainly on typological (and ^{14}C) grounds (Peltenburg 1983:21), and it is only within each sector, that some kind of stratigraphical association could be followed (Peltenburg 1983:37).

The excavation of the site was conducted by E. Peltenburg in a four seasons project (1969-1973) and the results were published in 1983. Although research was interrupted by the political evens of 1974, the exceptionally well preserved nature of the site and its uniquely deep stratigraphy, seem to compensate for the fragmentary nature of the available record.

The nature of the sample and the settlement layout:

According to the chronological sequence established by the excavator, the distribution of buildings and floors, indicates an expansion of the settlement to the south during the middle phase (ill.83). The same phase has also yielded the largest number of floors per structure, constituting in this way, the most intensive period of rebuilding in the settlement.

The lack of information for the later period seems to be the result of erosion (buildings closer to the surface), while the limited number of floors in the earlier period, in the north sector, should be attributed both to the nature of the stratigraphy of the site (buildings on top of each other, difficult to reveal lower layers) and the incomplete nature of the project.

Despite the difficulties, however, the information from the site is significant, and provides a good sample for analysis. In a total of 30 units, 11 are undisturbed and completely excavated, 10 of which belong to the middle phase and 1 to the late (ill.85).

Examination of the sample by phase (Level I of analysis):

The size and the type of segmentation that characterises the structures of the settlement in each period vary significantly (ill.84). The space that structures occupy, increases by phase, and the size of buildings varies considerably as we move into later periods. Moreover, while in the early phase there is no indication of partitioning within the structures (type A), in the middle phase there are identified at least five types of segmentation (types A: no partition, A': no partitions but part of a larger unit, Ba: room with a partitioning wall, Ba/A': with a partition wall and part of a complex, Bc/A': with an enclosed area and part of a complex).

With regard to the relation between size and segmentation types and the way that this is displayed in the general layout of the settlement (ill. 86-89), two further points should be stressed:

i) in the *north sector* there is very little indication of architectural segmentation, both in the early and the middle phase. The majority of structures have no internal partitions at all, with the only exception of buildings 1 and 12 which nevertheless display the simplest kind of segmentation (type Ba: partition wall), and belong according to the director to the latest part of the middle phase. On the contrary, the number of segmentation types identified in the *south sector* in the middle phase is much greater compared to the north, while at the same time, segmentation moves towards an opposite direction, from very segmented forms (Ba/A': with partition wall and part of a complex, Bc/A': with an enclosed area and part of a complex) into simpler (A': without partitions but part of a complex).

ii) there seems to be no connection between size and segmentation types: type A, the less segmented, can vary from 7.20 m^2 - 25.00 m^2, while type Bc/A' with a considerable degree of

segmentation (an enclosed area and part of a complex), can be found both in small (7.20m^2) and big (15.60m^2) structures.

In the case of features (ill. 90, app. III) a general assessment indicates almost even distribution among phases and sectors, with a slight decrease in the north sector of the middle phase and in the south sector at the late phase. Typological variability (the number of types of features) on the contrary indicates higher qualities for the middle phase and in particular the south sector.

An even more detailed analysis of the three main categories of features that we have defined for the purpose of the present analysis: 'hearths', 'platforms' and 'fixed containers' makes the picture clearer (ill. 91-92). According to this for example, though in quantitative terms the number of hearths per structure reaches its pick in the north sector during the middle phase, in terms of types south sector in the middle phase is 'richer'. Could this be an indication of the fragmentation of the household in the south? Greater variety is also attested in the type of 'platforms' in the south. Could this indicate an intensification in activities inside the structures, or the need to accommodate more inhabitants? In addition, the middle phase in the south sector, has a high concentration of posts, an element which is quite limited in the north (for both early and middle phase) and probably indicates changes in the way of construction of buildings or even less permanent and more flimsy rearrangements within the structures (ill.93).

The information from the latest phase is quite poor, but a decrease in the use of hearths, the considerable number of pits (compared to the other phases) and the lack (almost) of artefacts associated with floors might indicate some kind of changes in the way structures were used and perceived, may be the need to adjust to new and more unstable circumstances.

The distribution of artefacts (ill. 94), on the other hand, reinforces the above pattern of features. Here the difference in deposition between north and south sector is striking. However, in typological terms (ill. 95) there seems to be no difference between the early and middle phase, while a closer examination indicates a slightly higher variability in the south sector. Equally significant seems to be the distribution of other unspecified/broken objects (worked bones and stones, socketed stones, ring-cut bones, flaked tools etc.), which again points to a larger concentration in the north sector (for both early and middle phase) (ill. 96).

Bearing in mind the patterns identified above, one could suggest that there seems to be a difference in the way space in used in the two sectors in Ayios Epiktitos - Vrysi:

- Space increasingly becomes more fragmented either through a greater diversity in size of structures or through internal arrangements and partitionings. In the *north* there is gradually an attempt to define more and more certain areas within the buildings which would probably characterise certain activities (e.g. segmentation at a later stage: middle phase), while in the *south*, the need to separate certain areas is evident right from the beginning, and it seems that

structures are gradually freed from this role and move towards simpler forms (type A' of segmentation), may be due to the fact that certain activities are now accommodated in adjacent buildings which were made for this specific role. It could be suggested therefore, that while the north is moving at its very last stages towards the segmentation of single units, in the south this segmentation has started from the very early stages, it was much greater and it might have ended up in the fragmentation of single units and the creation of annexes and secondary rooms. The problem of contemporanouity in the archaeological record unfortunately does not allow the verification of a hypothesis as the above, which is so far based mainly in the relation between size and segmentation types. However, differences in the distribution of the features seem to support it (see above).

- Along with the expansion from the north to the south during the middle phase, there seems to be also a shift in the typological variability of feature and finds, which is now slightly higher in the south sector. In terms of depositional variability, though the average number of features does not change dramatically from phase to phase or from sector to sector, the variability of objects shows a striking concentration in the north sector, for both the early and the middle phase. It is therefore clear that the identification of a 'richer north' by the excavator of the site (Peltenburg 1983, 1985, 1993) is accurate. Indeed, intergenerational competition seemed to have favoured 'elders over those who came after' (Peltenburg 1993:10), if one judges from the depositional variability testified in the north and also the occurrence of 'ritual equipment' in the same sector (Peltenburg 1993:11). However, the present analysis makes clear that this 'wealth' in the north refer to depositional and *not* typological variability. A pattern which might reinforces even more the imbalance between the north and the south. c) finally the distribution of finds might further indicate, differences in 'disposal habits' between the two sectors (see also Peltenburg 1983:105), or even a more intense use and reuse of objects in the south sector (as the rates are really low).
- Late phase, finally, though very poor in information, indicates specific changes in the way interior space is conceptualised, in the sense that now hearths are not the typical features of every floor any more while at the same time the existence of pits within a structure becomes more and more frequent.

Examination of the material by structure (Level II of analysis):

In this section only the units that are completely excavated, preserved and undisturbed are examined and this inevitably limits the sample. As a result there are no available units from the early phase, while there is only one from the late. The bulk of information comes from the middle phase with 10 units, 3 from the north and 7 from the south (ill.97-100, see also app. IV,V).

The analysis of the size, types of segmentation and contextual information of the units under investigation points to the following patterns:

i) In the *north*, there are relatively large structures with no indication of segmentation. Features are quite evenly distributed, and there are no fixed containers. The relation between implements and other objects is similar in all units and apart form the fact that unit 7 in Building 5, concentrates the highest amount of implements, there is no other significant difference in the sample.

ii) In the *south*, the pattern is different: The variety in the distribution of features is significant and there are differences from floor to floor even within the same structure (building B2A, B2B, B3). From a total number of 7 units, two concentrate the larger number of features (unit 14/Building B2A, and unit 21/B3), while at the same time they vary significantly in size, type of segmentation and content of finds:

unit 14 has a considerable size (15.60m^2), is part of a larger unit and has a well defined enclosed area in it. The distribution of finds indicates a majority of miscellaneous objects (with a high concentration of beads) and very few implements.

unit 21, on the other hand, is much smaller 7.50 m^2, is adjacent to other structures and has no internal partitioning at all. In this case the content of finds indicates a great majority of implements (with a considerable variety in types) and very few miscellaneous objects.

A more detailed analysis highlights the differences even more: Unit 21 for example has quite distinctive features: fireplaces and an oven instead of the two hearths and a fireplace that unit 14 has; it has also 3 slabs and a bench instead of two benches and a paving (in unit 14). Moreover, the types of implements found in unit 21 vary considerable: 1 pestle, 6 grinders, 7 rubbers, 2 querns etc. (app. IV).

Finally, another characteristic of this sector is the existence of many floors that they have only one kind of feature (unit 18/B2B and unit 26/B4B only hearths, while unit 22/B3 only benches), an element that is quite unusual for the north sector, where as already mentioned there is a very even distribution of features in all floors.

As far as the late phase is concerned, information is quite poor (only one unit: 30/Building B4B) making impossible any comparisons, but nevertheless indicating a rather different and quite flimsy internal arrangement with 2 cobbled areas and two pits being the main features on the floor (app. IV,V).

- To summarise one could say that a more detailed analysis of the content of floors in the middle phase has supported further the first indications about the settlement, that the expansion towards the south sector followed a different line of development. Based on the segmentation of structures (no partitions in the north, partitions in the south), their size (larger in the north), their features (homogenous in the north, more variable in the south), and their finds (which do not differ in typological terms but vary in depositional), the particular sample from the middle phase indicates a different treatment of 'bounded space' in the two sectors. In other words the shift of the

settlement to the south seems to be followed by a change in the way built space was used, a greater fragmentation in architectural types and may be, up to a degree, in their use. However, in the light of the evidence from the north, and as no specialised activities and workshops of any kind can be identified in the site (Peltenburg 1983:101), one must suggest that this is rather the result of different needs which might have been created by the increase in population size, intensification of activities, extension of nuclear families etc. rather than the operation of complexes of households (Peltenburg 1978, 1985).

Furthermore, one of the most striking elements of this level of analysis is the realisation of the dynamic nature of the structures within which every floor changes constantly: size, partitions, features or objects. A first assessment for example indicates that no two floors are the same in number and types of features despite the fact that typological variability of finds is more or less the same for both sectors.

4.4.4 Some concluding remarks from the case study

The aim of the above analysis was to investigate the potential that contextual information and microscale analysis have to offer in archaeological inquires. The analysis concentrated on the size, the segmentation type, the features and the finds associated with floors and attempted to identify based on this material the way that domestic space was used and divided.

Neolithic Cyprus provides an exceptionally rich and well preserved record for such synthetic studies and Cypriot archaeology with its abundance in extensively excavated sites and published material, provides a unique sample for the study of spatial variability within and between settlements. Problems related to the nature of the archaeological record always exist, and indeed in some cases the 'wealth' of the material constitutes itself an obstacle as the existence of multiple occupational layers can make difficult the access to earlier periods and the association between specific floors and structures. Despite all the difficulties however, there are at least three sites (Khirokitia, Sotira, Vrysi) from the Neolithic period in Cyprus, which allow detailed contextual analysis at a significant level.

A review of the material examined above, in relation to the cross-cultural approach which investigates problems from a wider perspective (in this particular case: the way domestic space was used based on the examination of structures and their associated finds and features in three different Neolithic sites), have pointed to several patterns, regarding both methodological and theoretical issues. The application of some 'tentative' Data Quality Control Factors on the sample, provides the opportunity for some of these observations to be presented in a 'clearer' (quantitative) form and the following paragraphs will refer initially to these.

In terms of the nature of the available archaeological record: The 80% of the units revealed were excavated completely, a fact that shows the attempt of all the projects under examination to

investigate the overall layout of the settlement rather than focus on temporal sequences, as it is usually expected from 'older' and more 'traditional' approaches to the material. Furthermore, judging from the amount of units which seem to be completely preserved (approximately 70% for all the sites), it is obvious that the overall preservation of the record is exceptionally good (ill.101). The examination of the disturbance of the sample indicates a difference between Neolithic and aceramic sites (30-40% for Khirokitia, 60-65% for Sotira and Vrysi), which could be explained by the concentration of graves within the structures of Khirokitia and the inevitable disturbance they cause to the underlying layers. Finally, an even amount (30 to 40%) of completely excavated and preserved units seems to derive from all sites, which is analogous however to the size of each excavation (ill. 102) and not the size of the settlements.

Despite the fact that many of these results could be extracted with empirical observation, it is clear that the above 'tentative' figures, have provided some scale for the comparison of the nature of different archaeological records and have managed to distinguish between problems in the sample related to the nature of the record and problems related to archaeological practices.

Examining the archaeological material now, some further points could be made: In terms of the depositional variability and the 'disposal habits' of each society, there is a clear difference between aceramic and ceramic period. Floors in Khirokitia seem to be almost empty (90%), while Ayios Epiktitos - Vrysi provides the 'richest' sample in finds associated with floors (ill.103).

The distribution of features per unit indicates a higher value for ceramic sites as well (ill.104). This could be an indicator of the fragmented and somehow 'disperse' households in Khirokitia, in contrast to Sotira and Vrysi, which seem to concentrate more activities within one unit.

The distribution of finds on the other hands, highlights again the difference in 'disposal habits' attested before, and indicates that Vrysi provides the 'richest' sample. The three main typological categories used in the thesis for features and finds seem to be too general to indicate any differentiation among sites (ill. 105). Differences in the terminology of types among different projects however, make difficult any other more specific analysis.

Useful finally, should be the attempt to identify different types of structures in each site, according to the type of features and finds which are associated with them (ill.106a,b). As already mentioned in the analysis, the sites display different spatial arrangements and a considerable degree of segmentation. An review of the different types of units identified in each site indicates both regional and temporal differences within and between the settlements (ill. 106a). In the south sector for example in Khirokitia (Dikaios) we seem to have less variability compared to the north (Le Brun). In Sotira and Vrysi on the other hand, space seems to become more and more fragmented as we move into later phases. Is there a difference between north and south in Khirokitia? Do structures with certain features indicate specific functions? What was the role of empty structures? Why do they

seem to appear only in the south (Dikaios' excavation) in Khirokitia? These are all questions simply highlighted by the present research but they certainly worth further investigation.

Similar differences are observed in the distribution of finds as well (ill. 106b). Though in the aceramic period we seem to have floors associated with only one type of finds, in the ceramic Neolithic, the distribution of finds becomes more variable and the number of units which contain more than one type of finds increases considerably. However, with regard to these patterns one has always to bear in mind that the distribution of finds might be effected by different formation processes and this particular evidence therefore can be hardly considered, on its own, 'reliable' for the identification of the way structures were used.

In summarising the main issues stressed by the above analysis, one has to refer to:

- The constant changes in spatial arrangements within and between structures, and the contribution in that respect of microscale analysis in the understanding of the dynamic of settlements and structures.
- The potential of such an approach for further research having provided a meaningful frame for the development of hypothesis regarding spatial arrangements, behavioural patterns, social structure and organisation etc.
- The need to evaluate concepts taken usually for granted, as for example the role of artefacts in the identification of certain functions for deposits and features, the role of refuse in spatial patterns and what does this particular type of material actually consists of (animal bones, broken artefacts, sherds? etc.), the concept of periodisation and stratigraphy in archaeology and the need for their refinement when linked with questions about spatial patterns and function of buildings.
- The task of 'cracking the architectural code' (David 1971) in a particular settlement and getting involved therefore with the significant problem of 'inferences' in archaeology: the problem in other words of how we identify certain areas, as areas of a specific activity, and furthermore, what do these patterns represent in terms of social formation and structure? We have seen for example that in Sotira at least there is a considerable segmentation among structures which seems to indicate similarities with Khirokitia, suggesting the fragmentation of domestic units ('households') into more than one structures. However, these kind of reconstructions are based on some fundamental questions for archaeology: how do we identify a 'general habitation' unit in the archaeological record? what does a 'kitchen-room' consist of in past societies? and do societies 'expressed' their everyday needs and 'ideas' about space in the same way? In particular with regard to Khirokitia and Sotira, what was the use of the large and the smaller structures in the two sites? In the case of Sotira, Stanley Price suggested that the centre of activities was inside the larger structures while smaller ones were of secondary use, in Khirokitia however, Le Brun seems to identify certain roles in all types of structures indicating a greater fragmentation in the operation of the household in terms of architecture. One can ask therefore, which was the form

of the social unit in the two sites? was it similar or was it different? There are at least two levels of inferences here involved: one related to spatial arrangements and function and a second one related to how these are actually translated in social terms. The very nature of archaeology will always constitute an obstacle to these kind of issues, attempts for their understanding however, as the one attempted by the present research, could bring archaeologists closer to the material they examine and the 'real' nature of the archaeological record.

- Last but not least, one should refer to the importance of publications, and the need for all the above considerations to be taking into account in order to be able to deal with similar, synthetic questions.

In conclusion it could be said that the present analysis attempted to show an alternative way of looking at the spatial information in the archaeological record. Context in the archaeological record is traditionally used in order to provide a temporal and regional frame for the examination of particular types of features and finds, but here the analysis underlines the importance of context as an entity on its own which 'contains' several elements rather than being 'defined' by them.

In doing so, new questions and problems seem to have come up, as for example the identification and effect that abandonment processes might have on the patterns that we wish to investigate. However, the main point that becomes obvious from this analysis is that, if we wish to deal with other than the 'traditional' (and fundamental) issues of times and space of objects in archaeology, and want to stress the need for more synthetic and holistic approaches to the record, we should probably start from the most basic concept we use and take for granted in our discipline which is the concept of context.

4.5 Domestic space in Neolithic Cyprus

The major characteristic of Cyprus in this period with regard to domestic space is variety both in structural and functional terms. Settlements are usually found on prominent locations naturally protected and if natural protection is not enough, they are surrounded by walls. Structures vary considerably in size, they can be free standing or gathered in clusters and they have usually irregular shapes. Segmentation in habitational space is evident from the earlier stages, but has its own form in each site: in Khirokitia and Tenta for example is manifested mainly in the presence of piers, probably for the support of a loft, while in Kastros, Vrysi and Sotira takes the form of partition walls, and annexes.

In terms of permanent features and the relation between built and unbuilt space, structures seem to 'house' the majority of domestic activities although considerable number of features is identified outside as well. Characteristic is the example from Cape Andreas - Kastros where evidence indicates greater domestic activity in open areas outside the huts. The distribution of features among structures is not standardised either in forms or functions and it seems to indicate constant changes in the way space was used and perceived.

Significant is also the number of finds associated with floors in this period, in particular ceramic Neolithic. In general the 'wealth' of material in the sites is remarkable and it indicates great variety in depositional habits both within and between structures.

Apart from these general characteristics however, a detailed analysis would show that every site has a quite different spatial arrangement from each other. In aceramic period for example Khirokitia displays segmentation which despite its variability, is somehow 'ordered', if not in terms of function at least in terms of forms, judging from the specific, monumental type of circular structures in the settlement, the differentiated open areas, the monumental surrounding walls etc., while at the same phase Cape Andreas-Kastros indicates looser organisation both in terms of activity space (both inside and outside), and architectural forms. Similarly, Sotira and Vrysi, in ceramic Neolithic, display considerable differences in their layout, and they seem also to differ in terms of social formation.: in the first case, archaeological material points to the existence of complexes of households, while in Vrysi there is a much clearer pattern which indicates that in the beginning at least, each structure represented individual households.

In general however, despite all the variety in structural forms and use, and even the architectural standardisation in some cases (e.g. Khirokitia), there seems to be no standardised pattern in the layout of the settlement and the way domestic space was used.

CHAPTER V

LEVANT - ANATOLIA - GREECE

Identifying domestic space in the Neolithic period:
archaeological activity and available information

> "Hypothesis testing is a valuable under taking, but it must be preceded by hypothesis formation, which in turn can only be undertaken on the basis of data relating to the field in question. Such data only become available, to allow interpretation or hypothesis formation, when they are published in sufficient detail that others may become familiar with and hence use them. The problem of collecting and presenting evidence that will prove useful in the future, allowing the formulation and even testing of theories not yet imagined, remains an unsolved one".
>
> (Renfrew *et al.* 1986:13)

5.1 Introduction

The present chapter focuses on three areas in Eastern Mediterranean: Levant, Anatolia and Greece, and investigates the way in which the study of the available evidence could help in the identification of the way domestic space was used.

Following the main objective of the thesis, the question asked here is twofold: a) what is the available information related to domestic space and how sufficient this is in order to identify domestic use, and b) what can be said about the way domestic space was used and organised in the Neolithic East Mediterranean, and how can this information help our understanding of the structure of past societies.

So far, the case of Cyprus (chapter IV), has made clear that the identification of domestic space can be more adequately investigated when we have available well published, large scale excavations, in which detailed contextual and stratigraphic information is provided. It is only then that the dynamic changes within each settlement can be displayed, analysed and, up to a degree, understood. The realisation of this process of constant alterations in the way space is used, rather than a more 'static', and 'synchronic' view of what an archaeological site depicts, provides a better understanding of the actual nature of the archaeological record, and indicates the potential that spatial studies have on different levels of analysis (within and between settlement).

As will become evident, the material examined in the present chapter does not allow a detailed approach like the one attempted in Cyprus. The fragmentary nature of the available information, its state of publication, which in the majority of cases is restricted to preliminary reports, as well as the focus and the 'nature' of the archaeological activity in each area, are some of

the factors that prevent such an attempt. As a result, the focus has to be shifted inevitably from the analysis of detailed contextual information to a more general comparison of habitational elements.

It is true, that general comparative studies are quite common in current literature (chapter III), but they usually focus only on certain, isolated aspects of architecture (e.g. size or shape of structures). What the present chapter attempts to do instead, is to undertake a more holistic review of the material related to the way space was used in each area, in order to investigate the limits of archaeological research practised so far, and the ways in which comparative studies regarding the identification of domestic space could improve.

The discussion is divided into two main sections:

i) an introduction, that sets the frame and examines the nature of archaeological activity undertaken in each area, with regard to the Neolithic period, and

ii) a review of the available information, and what one can actually say about structural segmentation and the way space was used and organised in each settlement and in different areas in Eastern Mediterranean in general.

One should recognise that a detailed analysis of all these issues could be the subject of several research theses. However, the understanding of the main factors and parameters that 'form' the archaeological record as well as an overall review of the available information, could help clarify the problems related to the identification of domestic space in archaeology, and provide in this way the basis for any kind of future analysis.

5.2 Domestic space in Neolithic Levant

5.2.1 Neolithic period and archaeological activity in Levant

Levant extends from the Mediterranean to the Euphrates and from the Taurus Mountains in Turkey to the deserts of northern Arabia and Sinai and is defined by a coastal range, an inland mountain range and a sloping plateau eastwards. According to its geomorphology it can be divided into a fertile zone with forests and wet steppes (central and northern part) and an arid zone with dry steppes and desert (east and south) (Byrd 1992:56). Along with this topographical diversity, there is considerable cultural diversity, already present in the Neolithic period, and also diversity in the way archaeological activities are conducted in the area, both in terms of fieldwork and objectives (Perrot 1979:13, Adams 1983).

The present section will start by reviewing this later issue of the nature of the archaeological activities in the area, in order to provide a better understanding of the way that the archaeological record and the questions asked about Neolithic period have been formed.

The wealth of the material culture in Levant as well as the excellent preservation of the sites, has attracted from the very early ages the attention of many antiquarians and archaeologists. However, depending on the history of each region, this interest in antiquities has taken different forms and directions.

Already from the 19th century for example Palestine was singled out and related to the land of the Bible, and this particular focus on a specific period dominated Palestinian archaeology up to the most recent years (Dever 1981:18, 24). Perrot (1979:35) describes in a very successful way the atmosphere of that period, through the archaeological activities of British society:

> "The increasing interest in this part of the ancient world led to the establishment in 1865 of the Palestine Exploration Fund for the exact and scientific study - archaeological, topographical, geological, geographical and ethnological - of the Holy Land in order to throw light on the Bible story. To Protestant and Victorian Britain the land of the Bible was of more interest than the shadowy empires of Assyria or Egypt. The Palestine Exploration Fund was the first British society for the study of the past in a country other than Britain, twenty years senior to the Egypt Exploration Fund, fourteen years senior to the Society for the Promotion of Hellenic Studies".

One has to keep in mind that already from the beginning of the 19th century, western thinking, in an attempt to define its own cultural identity, was dominated by the ideas of 'Orientalism' and 'Hellinism', which viewed "' The Orient' as fantastically ancient and unchanging, the possessor of a sterile wisdom which needed the youthful, original spirit of the Greeks to transform it into Europeanness" (Morris 1994:20-21). Within that frame the interest to study new cultures in the distant orient was triggered, and apart from Palestine, other areas in the Levant such as Syria (constituting the frontier territory of the Assyrian and Babylonian empires) and Lebanon (the cradle of Phoenician civilisation) became the focus of intensive archaeological investigation (Perrot 1979:14).

This broad western interest in the area, along with the local history of political fragmentation in the beginning of the century, had as a result a great influx of foreign archaeological projects which initially concentrated on large Palestinian tells: Dura Europos 1922, Ras Shamra 1928, Mari 1933 (Perrot 1979:43). It was precisely because of this research that the existence of much earlier cultural stages became obvious to archaeologists, and gradually archaeological activity started engaging in the exploration of prehistoric deposits, mainly after the Second World War (Moore 1985:3).

This involvement of foreign projects in the archaeology of the Near East set the 'agenda' for the Neolithic archaeological research in the area.

At a theoretical level the idea of what defines 'Neolithic period' started emerging already from the 19th century. The concept of 'Neolithic' had been initially used in European prehistory, and was introduced to the Old World having the same parameters: a) technology, which was defined by the use of stone and the distinctive 'technology of grinding stone instead of flaking it', and b) subsistence patterns, which were defined by the presence of domestication and farming (Bar Yosef and Cohen 1992:33, Özdogan 1995:43). At the same time archaeology was influenced by diffusionists ideas in other disciplines (biology and social sciences), which seemed able to provide an explanation about the ways in which cultural and technological achievements in Neolithic period

could have spread out (Özdogan 1995: 44). As a result archaeologists gradually got involved in the debate of general themes such as: domestication, agriculture, sedentism and colonial movements in Europe and the Old World, seeking to understand where and why 'Neolithisation' happened. The first theories concentrated initially on the reasons that caused the Neolithic 'phenomenon', suggesting the movement of ethnic groups and/or environmental factors (Childe 1951, 1952), while at the same time sought to define the place of origin (a 'nuclear zone') of the first Neolithic societies (Trigger 1989, Moore 1985, Wright 1971).

Despite all the theoretical debates however, at a practical level research was rather slow, and it was only with Braidwood in the early 1950s that the first systematic attempt was made to test in practice all the relevant theories about agriculture (Özdogan, M 1995:45). Braidwood could be considered a pioneer of prehistoric studies in the Old World, not only because he draw attention to the study of Neolithic period, but also because he showed the importance of multidisciplinary research in prehistoric studies and recognised the significant role that natural scientists could play in the field. His influence on prehistoric studies in the Near East was immense: a) with his Jarmo Project in Iraq (Braidwood and Howe 1960) he set the standards for regional projects, multidisciplinary research, and the study of agriculture in a systematic way, b) with his work at the plain of Antioch (Amuq) (Braidwood and Braidwood 1960) he established the chronological frame for northern Syria which still constitutes the basis for much of the current research (Akkermans 1993: 1), and c) more recently with the Joint Prehistoric Project in SE Anatolia (Braidwood and Braidwood 1982) he highlighted the importance of Anatolian Prehistory for the study of early-village farming societies and agriculture (Özdogan, A 1995:80).

Around the same period (after the Second World War) a number of other projects started in the Levant, conducting smaller scale excavations but focusing on issues more or less similar to the above (Moore 1985:3, Perrot 1979): Kenyon in Jericho, de Contenson in Ramad and Ras Shamra, Kirkbride in Beidha, Perrot in Mallaha and Munhata.

Since that period, there has been an increasing interest in the Prehistory of the area, which seems to be the result of a combination of factors: a) the movement of New Archaeology (chapter I) which gave emphasis to questions of economy and subsistence and led, with the introduction of new techniques, to the collection of relevant data (samples of plant and animal remains); b) the belief that environmental questions could provide satisfactory results without dependence on large scale projects (a very important factor if one keeps in mind that around the 80s 'cultural resource management' was perhaps the 'largest single concern' for American archaeology, Dever 1981:25); c) the fact that prehistoric questions were 'distant' from issues related to the political instability in the area (Perrot 1979:11); and d) the numerous economic, political and social developments in the area that had as a target its modernisation and necessitated 'salvage' projects (Moore 1985:7).

As evidence started accumulating, the first attempts for synthetic presentations appeared, covering not only generally the Near East , (Mellaart 1975; Redman 1978) but also more specifically

the area of the Levant (Perrot 1968, Cauvin 1978). Research was now engaged in the study of models about the origin of villages (Flannery 1972), the examination of architectural types at a cross-cultural level (Aurenche 1981), and the comparison of chronological sequences from different sites (Cauvin and Sanlaville 1981, Aurenche, Cauvin and Sanlaville 1988, 1989).

Despite the fact that the main 'traditional' themes (agriculture and subsistence) still dominate current archaeological debates in the area, many of the initial ideas related to them, have now changed, as the abundance of information made clearer the complexity of these issues and the shortcomings of many of the current practices. The problems identified touch upon several aspects of archaeological research: a) the nature of the archaeological record, which being multi-period, makes difficult the isolation of 'unmixed assemblages' and therefore undermines the validity of any suggested chronological scheme (Bar Yosef 1981); b) the concept of 'Neolithic' in the Near East which seems to be different from the one in Europe from which it was initially introduced (Bar Yosef and Belfer Cohen 1992); c) the problem of the homeland of Neolithic, the location of which seems to change with every new site that is uncovered (Özdogan 1995:53); d) the complexity around the issues of domestication and sedentary village life, which has proven that both our methods of identification and our interpretative models are so far inadequate (Moore, 1985, Redman 1983, Adams 1983); e) problems related to fieldwork practices, such as the limits that small soundings in individual sites impose and the necessity for regional sequences (Akkermans 1993:1-2, Özdogan 1995:45, see also Kuijt 1994 for problems in the identification of PPNA sites), and f) the lack of final publications and the necessary reliance on preliminary reports which inevitably lead to 'erroneous conclusions' (Bar Yosef 1981).

The following section focuses on some spatial aspects from the archaeological record in Levant, by examining buildings and the features and finds associated with them. The aim is to attempt a cross-cultural study of the way in which space was used in different societies.

Although many of the problems mentioned above would undoubtedly restrain any attempt to examine spatial issues in depth, it is considered here worthwhile because if nothing else, it provides at least the opportunity to distinguish between problems which are related to the nature of the archaeological record and those which are related to our own practices. Moreover, a study on spatial patterns from a cross cultural perspective would help to move away from the 'great themes' of sedentism and agriculture, and following Redman's suggestion, change the focus 'from the environmental and demographic context of the introduction of agriculture and settled village life to discernment of the crucial elements of the *transformation in the nature* of the communities themselves (Redman 1983:189).

5.2.2 Neolithic sites and the 'use' of domestic space

Before discussing the evidence, some comment should be made about the available chronological systems. Despite the importance of chronology for any kind of synthetic and comparative analysis, research in Levant seems to be far from reaching a consensus about chronology and terminology, because of the new material which is coming up and is changing the state of our knowledge constantly.

Dornemann's description is characteristic of the current situation:

> 'Subdivisions, into early, middle, late or just early and late, or upper and lower, simple numerical period designations, or aceramic and pottery periods, are applied with more or less consistency by individual authors on the basis of their particular viewpoint. If one traces a particular time range over a wider geographical area, the variety of designations becomes even richer. It is difficult to find a consistent nomenclature by which to divide the millennia of Neolithic occupation.' (Dornemann 1986:54)

Although still in use at a great extend, the original division of the period into 'Pre Pottery Neolithic A and B' (PPNA and PPNB) and 'Pottery Neolithic A and B' (PNA and PNB) (Kenyon 1957) has been subject to many alterations. PPNA is viewed by many researchers as a continuation of the previous (Natufian) period (Perrot 1983, Redman 1978), and not as an independent phase anymore, while an additional phase is now added between PPNB and PNA : most commonly known as final PPNB (Aurenche 1981) or PPNC (Rollefson *et al.* 1992).

Alternative classifications have been also suggested dividing the Neolithic period into Archaic and Developed according to the nature of subsistence economies (Moore 1982), or into simple numerical categories : 0, 1, 2, 3... The latter scheme has been suggested from the Lyon School (Hours *et al.* 1994), is based mainly on key dates from Levant and Mesopotamia and is 'the result of a dialectic balancing cultural developments against the absolute chronology (^{14}C dates)' (Hours *et al.* 1994:18).

In the present thesis I will follow this latter system because it seems to be the only one that has attempted to view the evidence in the Near East from a holistic point of view, and it is based on material which is regularly updated (based on two international symposia on '^{14}C and archaeology' and with the 3rd forthcoming in 1998). Furthermore, as not all geographic areas have similar characteristics, it was considered that the division into numerical categories would be most appropriate and give greater flexibility to comparisons.

According to this system therefore, Neolithic occupation in the area of Levant is divided into the following periods: Period 2 (PPNA): 10.200-8.800 BC, Period 3 (PPNB): 8.800 -7.600 BC, period 4 (final PPNB): 7.600-6.900 BC, period 5 (Obeid 0): 6.900-6.400 BC, period 6 (Obeid 1): 6.400-5.800 BC, period 7: 5800-5400 BC, period 8: 5400-5000 BC, period 9: 5000-4500 BC. (see ill. 2).

After period 6 and for the special purpose of the present thesis, the chronological sequence refers only to the Neolithic in Greece and Cyprus (based on Papathanassopoulos (ed.) 1996 for Greece, and Knapp and Manning 1994 for Cyprus), because the rest of the areas (Levant and Anatolia) are entering the chalcolithic period[1].

Period 2 / PPNA (ill.107-115, 133-141)

Evidence for this period comes from the central part of Levant, with only one exception, the site of Mureybet which is located in northern Syria.

Mureybet has been excavated by two different projects (Van Loon 1966, 1968 and Cauvin 1977) which despite the similarities in material culture have revealed two completely different types of architecture: multi-roomed rectangular structures in the first case and multi-roomed circular structures in the second (ill. 108-110).

The layout of the settlement is only discernible in the second excavation and it consists of groups of adjacent structures which vary considerably in size. Outdoor activities are rather restricted and apart from a few fire pits and paved areas no other features have been identified. However, in both excavations there are indications of enclosed unroofed areas related to particular structures (str. 19 from Van Loon, and str. XLVII from Cauvin) which seem to have 'housed' working activities (Aurenche 1980:51, Van Loon 1968).

Judging from the distribution of features (hearths, benches, basins) the majority of domestic activities (cooking, working, resting, storing) must have taken place inside the structures, while inside there are also 'housed' primary and secondary burials. The evidence for wall paintings in two structures (Cauvin 1977:30) is an additional indicator of the increasing importance that 'bounded space' had in everyday life.

With regard to contextual information the evidence is scarce and no assessment can be made about the particular use of structures or the processes of abandonment. In general however, structures seem to have been left 'clean' of finds (Aurenche 1980:41), although exceptions do exist, as in the case of 'room a' in structure XLVII, in which a 'cache' of tools was found near the entrance (Aurenche 1980:37).

The pattern from central Levant is quite different and information here derives from five sites: **Hatoula, Gilgal, Netiv Hagdud, Jericho and Nahal Oren** (ill. 111-115).

The commonest type of structure in this area is round or oval in shape and has no partitions at all. However, an additional type, with partitions and more than one room has been also identified in Netiv Hagdud and Jericho (see ill. 136).

From all the sites, **Jericho** stands out because of its size and its remarkable communal structures: a) the surrounding wall, interpreted as part of a defensive system (Garstang 1935,

[1] but see Akkermans 1993 in which Halaf is considered late Neolithic.

Kenyon 1957), or most recently as a protection from floods (Bar Yosef 1986), and b) a number of enclosed areas interpreted by Kenyon as silos, probably for the storage of grain (Kenyon 1981). Unfortunately, because of the nature of the trenches which were very long and narrow, and the location of the deposits at the bottom of the tell, information about any other type of architecture on the site is very fragmented.

The rest of the sites seem to provide a rather uniform pattern with structures that are mainly free standing and of variable size. **Netiv Hagdud** (Bar-Yosef 1991), being the most extensively excavated site of all, provides an excellent example of the layout of a settlement in this period, and is characterised by great variety in structural forms: free-standing and adjacent structures, with and without partitions, small and large.

Features do not seem to be abundant in these sites. The area outside the structures is rather neglected and only few examples provide evidence of fireplaces or storage pits (silos). Interiors were usually equipped with hearths and cup-marked stones, a feature which at least in the case of **Gilgal I** (Noy 1979) seems to have been used for pounding and grinding small quantities of herbs. The distribution of features within and between structures is also noteworthy: in **Netiv Hagdud** (Bar Yosef and Belfer - Cohen 1992, Bar Yosef *et al.* 1980, Bar Yosef *et al.* 1991) for example structures seem to contain only one type of feature: either hearths or cup-marked stones; and in **Gilgal I** (Noy *et al.* 1980, Noy 1989) no hearths were identified indoors, while the presence of a 'silo' inside a structure (str. 11), is rather exceptional, as the majority of silos during this period, is usually located in open areas (ill. 137-138).

In depositional terms, patterns also vary considerably, and although no information about animal bones and refuse disposals is reported, the number of finds associated with particular structures is significant. Certain structures in **Netiv Hagdud** (loc. 8) and in **Gilgal I** (str. 11) do stand out, because of the variety and quantity of finds related to them. However, in the lack of detailed contextual information from *all* the excavated structures, valid comparisons are difficult to be made. Furthermore, the obvious existence of different abandonment processes among structures, as is evident in the case of **Netiv Hagdud** (Bar Yosef 1991) where some structures were full of artefacts, while others were found empty, call for a greater attention in the study of depositional variability and the need to examine the 'history' of each structure separately. The limited amount of information available in preliminary reports does not allow further analysis at this point (ill. 139).

Domestic space in period 2 (PPNA)

Summarising the way space was formed and used in this particular period, the following points could be made:

- Levant displays two different architectural patterns one in the north and the other in the south: in the first case structures are multiroomed and rectangular or circular in shape, while in the second they appear to be round or oval and mainly have no internal partitions at all.

- The centre of domestic activities, judging from the distribution of fixed features, seems to be inside the structures in both areas. However, certain differences do exist: in the north, structures seem to have more elaborate interiors, and apart from some regular features (hearths, silos) they contain benches and platforms, which are not seen in the south at all. In general the south displays greater variety between structures and no typical set of furnishing inside them.
- Although information about open areas is not very clear, they seem to be neglected, both in the south and the north. The presence of 'enclosed unroofed areas' in the north however, reserved for working activities, could be considered a manifestation of some first attempts towards 'privacy' and control of access to certain activities.
- In depositional terms, the information is very fragmented but again two patterns are very clear: in the south structures are usually littered with finds, while in the north they are left very clean and rather 'empty'.

Period 3 (PPNB) (ill. 116-124, 133-141)

For the two sites in the north: **Mureybet** (Cauvin 1977, 1980) and **Abu -Hureyra** (Moore 1975), the tradition of rectangular and multiroomed structures continues. The most significant element regarding domestic use in this area, is the indication of a 'skull cult' taking place within structures (example from Mureybet), with plastered skulls placed on red plastered lamps serving as pedestals (Cauvin 1980:32). Unfortunately, the information from this period is too fragmentary for further assessment about the meaning and the context of this particular find.

From the sites in the south, **Beidha** is the most extensively excavated and although not yet published, the available information is enough to provide some idea about the nature of the settlement. The site was excavated by Kirkbride (Kirkbride 1966, 1966a, 1967, 1968) and according to the most recent reassessment of the material (Byrd 1994) can be divided into three main periods: A, B, and C, starting from the earliest period. In all three periods the settlement was surrounded by a wall.

Period A is characterised by adjacent curvilinear structures with post-socketed walls (ill. 122). The layout of the settlement consists of groups of structures separated by courtyards. The size of the structures varies considerably (1.7 - 32.6 m^2) and most of them have two entrances. The commonest features are hearths and platforms, but they are not usually found together in the same building (Byrd 1994:647). Specialised storage facilities are scarce and only one small room covered with slabs was interpreted as having a storage function (Byrd 1994 :648).

Information about exteriors is very limited and in general it seems that the majority of domestic activities: food processing and preparation, production and maintenance of tools, were taking place inside the structures (Byrd 1994:648). In depositional terms, the amount of artefacts left behind is rather high, and the great number of in situ finds, when published, would undoubtedly provide a unique source of information for spatial studies.

Finally, special attention should be drawn to some additional features on the site:

a) the largest structure (building 37) which apart from its size seems to have several special characteristics: a dominant position in the courtyard, a unique cobble floor, a central stone platform and also the fact that it was burned and contained no artefacts. Based on these elements Byrd suggested that this building had a non domestic use (Byrd 1994:649), and

b) a complex of three structures which was uncovered approximately 50 m from the main settlement, and had also some unusual characteristics: paved floors, interiors 'clean' of objects, and an unusual fill of dark clay, boulders and flint debitage. One of the structures (str. T1) contained a standing slab and was associated with a basin found outside. Kirkbride (1968:96) interprets that building as a shrine or sanctuary which was 'sealed off' intentionally. Despite the fact that the particular complex is usually attributed to this period (Redman 1978:149), Byrd in his review of the material, does not refer to it at all, and any attempt for interpretation should therefore await the final publication.

In period B the layout of the settlement seems to be rather different (ill. 123). The structures are now free standing (Byrd 1994:650) and a rectangular shape is making its appearance for the first time. The central courtyard is expanded and defined by two straight sides while access to the buildings is restricted and limited to a single entrance (Byrd 1994:651). The range in the size of structures has now decreased, but the variety of features within each building is greater (Byrd 1994:652).

Open areas seem to be used for cooking, and less artefacts are now found inside the structures, although poor preservation and the lack of burned structures in this particular subphase, might account for much of this pattern. Large buildings are identified again as non-domestic, because of certain features: a) a distinctive type of hearth, b) 'clean' interior without in situ finds, c) intensive replastering of floors (Byrd 1994 :652).

Finally, in phase C the layout of the settlement is much more differentiated and institutionalised (ill. 124). Now there are two kinds of courtyards: one central, elaborate, walled off, and with a mulitchambered outdoor structure used probably for storage, and others in the north, south-east and east, which are less elaborate and consist mainly of hearths and roasting pits (Byrd 1994:654). The same distinctive structural variability exists among structures as well. Apart from the small and large structures, a new type is making now its appearance: the 'corridor structures' or 'pier houses' (Byrd and Banning 1988). This is a two storey structure, with a basement divided by partition walls (buttresses) into a long corridor and small chambers to the right and left reserved for storage and working activities, and an upper storey used mainly for cooking, eating and sleeping (Byrd 1994:656). It is characteristic that no hearths were found inside the basements which were otherwise littered with tools and several kinds of manufacturing waste (Byrd 1994:655). This last pattern is even more striking compared to the complete lack of finds within the large structures of the period.

Information from the rest of the sites (**Jericho, Munhata, 'Ain Ghazal, Yiftahel**) is rather fragmented and no assessment about their layout is possible (ill. 116-121). They consist mainly of free-standing rectangular structures, similar to the 'pier house type' in Beidha but with many variations (Banning and Byrd 1987:310).

Jericho and **'Ain Ghazal** provide the most characteristic example with rectangular structures divided by piers which sometimes reach the side walls and form two or three successive rooms. This particular type has no basement and it is usually known as the 'megaron type' (Byrd and Banning 1988). Its roof was supported by a number of posts and its most common feature is a central hearth while occasionally there are also traces of storage pits and basins (Banning and Byrd 1987:315, 318, 320). Interiors were usually 'clean' of finds and information about outdoor activities is lacking (Banning and Byrd 1987:322). However, very few of these structures have been excavated completely, and therefore conclusive remarks about depositional variability are difficult to make. The great care with which the interior of these type of structure was plastered, sometimes with red ochre, as well as the effort put for their constant renovation and maintenance (see for example 'Ain Ghazal) are indications that their role in everyday life was rather important.

Some special comment should be made about the evidence from **'Ain Ghazal** because due to its state of preservation it provides a unique opportunity for examining changes within buildings. Although no structure has been preserved completely, the examination of at least four examples (house 4, 6,8,12, Banning and Byrd 1987) reveals significant trends: a) renovations in structures occurred over a relatively brief period and they seem to involve 'rebuildings and replasterings directly over clean, well plastered floors, without intervening fill or debris' (Banning and Byrd 1987:315), b) modifications resulted in smaller structures (Banning and Byrd 1987:320), and c) in one case (house 4), a room was abandoned and converted into an enclosed area nearby the entrance, and it was used for working activities (11 grinding stones were found at that point, used probably for food preparations, Banning and Byrd 1987:317). This is a pattern that has its parallel also in Jericho, where the enclosed area nearby the entrance, contained a hearth (Kenyon 1981: pl.263b-c).

The other two sites (**Munhata, Yiftahel**) attributed to this period provide a rather different pattern. Structures here are also free standing but shapes vary considerably.

Munhata displays two kinds of structures: one rectangular (layer 4) and one circular (layer 3) with surrounding compartments (Perrot 1964, 1966). Traces of hearths, benches and 'storing areas' (niches, basins) were found both inside and outside, but in the lack of any other associated structures, it is very difficult to identify structural variability at an intrasite level. In depositional terms the rectangular structure contained a number of tools, and stone vessels (Perrot 1964:326), while the circular structure at the centre revealed an unusual number of animal bones, and was interpreted by the excavator as a courtyard.

In **Yiftahel** there are often references to a megaron type structure, but the information is too fragmented and there is no indication of the actual relation of the structure to the settlement (Braun

1984). The structure which provides the bulk of evidence from this site so far, is excavated by Garfinkel (1987:206-209) and consists of a very large plastered area (110m^2) defined by two open courtyards and one roofed enclosed area with no subdivisions.

The bounded area had two entrances and contained a silo and a great number of stored seeds, while the open areas, were reserved for grinding and milling but also other more specialised activities, such as burnt lime production, greenstone working for the production of beads ('a lump of greenstone 55.09g, two beads and twelve small splinters), and cooking (25 hearths) (Garfinkel 1987:208).

The absence of a hearth inside the enclosed area is rather unusual for the period, but the excavator suggested that it might had been used also for sleeping, and therefore should be considered as a domestic dwelling. The storage potential of the silo found inside could support six persons all year round, and it could be considered evidence of surplus production used in exchanged for other items (Garfinkel 1987:210) . Associated structures are again lacking however, and as a result it is difficult to judge if this is a common type of structure for the settlement or if it was reserved for a particular, non-habitational, function.

Domestic space in period 3 (PPNB)

- Despite the fragmentary nature from the evidence in the north, differences between north and south are still quite evident: in the north structures seem to be large and multiroomed and due to their complex layout it is difficult to assess the 'residential boundaries (Banning and Byrd 1987:322); in the south however, structures are free-standing, loosely subdivided and their layout is much simpler.
- One of the main characteristics of this period in the south is the variability in architectural types which is evident both within and between settlements. The pier-house type is recognised as the standard house type for the area in this period, but it is important to note the variations which exist within the particular type (with basements and without), as well as the appearance of other forms of structures: circular with surrounding compartments (Munhata), or rectangular without any partitions at all (Munhata, Yiftahel).
- Despite the differences in forms, structures contained some standard features (hearths, benches, bins/niches) but the location of domestic activities seems to vary considerably: in Beidha working activities are usually identified inside the structures while in Yieftahel there is exactly the opposite pattern.
- Beidha in general provides a unique example of the way that a settlement can be transformed and change: in the first phase (phase A) there must have been a 'considerable interrelationship between adjacent buildings' (Byrd 1994:649), while the existence of some special features: village terrace wall, large non-domestic (?) structures, or even the 'shrine' , points to the operation of some kind of a communal regulatory mechanism (Byrd 1994 :650); in the second phase (phase

B), the variety of internal features increases and the structures assume a more private character (with one entrance), while the construction of large 'special' buildings continues (Byrd 1994:652); c) finally, in the third phase (phase C) the whole character of the settlement changes considerably and activities are now even more compartmentalised: the function and form of the central courtyard is differentiated from the other open areas, the basements are reserved for working areas, the upper storeys for living quarters, and in general there seems to be a clearer distinction between private and public activities (Byrd 1994:656).

- Finally it is important to keep in mind : a) that large structures and indications of a 'shrine' are present in Beidha from the earliest phase, and therefore change does not refer to the presence of new activities but rather to the fact that with time 'old' activities are institutionalised and compartmentalised; and b) that if the depositional pattern is a 'real' one and not the result of erosion and post-depositional activities, then it seems that different activity areas are followed by different depositional patterns: working areas are left littered with finds, while 'special' structures or living quarters are usually kept 'clear'.

Period 4 (final/late PPNB) (ill. 125-127, 133-141)

Although a considerable number of sites from this period has been excavated, the available information is very fragmentary due to a) bad preservation, b) the fact that many projects are still in progress, and c) the nature of soundings which are usually very small.

Information comes from two sites in the north: **Abu Hureyra** and **Bouqras**, one in the Syrian desert: **El Kowm**, and five in central and south Levant: **Beisamoun**, **Abou Gosh**, **Basta**, **Tell Ramad** and **'Ain Ghazal**.

Both sites in the north display a quite elaborate layout with multiroomed structures. The information from **Abu Hureyra** is very fragmented and apart from the presence of multiroomed rectangular structures no other specific information is available (Moore *et al.* 1975). **Bouqras** is extensively investigated and quite well preserved (Akkermans *et al.* 1981). The layout of the settlement indicates very good planning, with mudbick rectilinear structures divided by courts and lanes (ill. 125). Structures seem to follow a standard type, with one broad room, an enclosed courtyard and several smaller and narrower compartments (Akkermans *et al.* 1981) (ill. 126).

Fixed features (hearths, ovens, platforms, bins) are abundant inside the structures, but each site seems to retain its own unique characteristics. In **Bouqras** for example there is no indication of platforms and there are two different types of fireplaces (one oven in the courtyard, and a hearth inside) which probably represent two different kinds of use. Unfortunately apart from the obvious presence of courts and alleys no further information is provided about exteriors, but it seems that the majority of activities was taking place inside the structures. Interiors were kept clean from artefacts and the majority of objects was found in the fill rather than associated with floors. Primary and secondary burials were found both inside and outside the structures.

El Kowm provides two rather unique types of architecture which resemble structures that appear later in Mesopotamia; (Stordeur 1989:109) (ill. 127). The area is excavated by two projects, one working on the main tell and the other at a smaller neighbouring one within the same site. Information about the main tell is unfortunately fragmented and apart from a surrounding wall and red plastered floors not much else is known (Dornemann 1986:57). The lower part of the site however, has given two very distinctive types of architecture: one symmetrical T type and another that consists of many small and irregular rooms. Features seem to be rather standardised, with a very characteristic type of hearth set in a niche by the wall, or in the case of the T shape structures a set of three hearths: one in a niche by the wall, one rectangular, and a small circular one (Stordeur 1989:104). Deposition is rather low although incidences of *in situ* artefacts do exist (Stordeur 1989:102-103). Information about exteriors is not available.

One of the characteristics of this period, similar to the previous one, is the diversity in architectural types, sometimes even within the same site: **Basta** for example is characterised by a very elaborate complex of rooms (area A) with different levels, upper storeys (staircases) and channels (Nissen *et al.* 1987:90) the layout of which still remains unclear; while in a different section (Area B) it has produced clearly defined structures with one broad room and many smaller ones around it. This latter type, seems to follow the architectural principles from Bouqras (Nissen *et al.* 1987:91)(ill. 130-131).

'**Ain Ghazal** displays an even greater variety of architectural forms: with rectangular, apsidal and circular structures (ill. 128). The circular structure in particular seems to have a special function, because it was frequently replastered and had a circular hole in the middle related to channels for ventilation. Rollefson suggests that it was used for ritual activities and it was an altar (Rollefson and Kafafi 1994:23). Rectangular structures in general consisted of small rooms with no features inside, apart from one case with a storage vessel (Rollefson *et al.* 1992:449, see also: Rollefson and Simmons 1984a, 1984b, 1985a, 1985b, 1987, 1988).

Abu Ghosh and **Beisamoun** are rather poorly preserved. They are both characterised by free standing structures divided in a number of rooms, but each of the sites has also its own particular characteristics. In Abu Ghosh there are two types of structures: one with small cells (similar to corridor str. from Beidha; Lechevallier 1978:25) and another one with a single room without partitions. Beisamoun, provides only one well preserved example, of a structure with one room and a portico.

Finally **Ramad** (Contenson 1969, 1971) provides a very fragmentary picture of rather free-standing structures without partitions.

Information about features is limited but in general the record seems to be poor. Deposition however, displays two very clear patterns: one that refers to abandonment processes in **Beisamoun**, and another that indicates a relation between burials and features in the site of **Tell Ramad**:

a) in the only well preserved structure in **Beisamoun** (level 1) (Lechevallier 1978:143-144), deposition seems to be rather high, especially in the first of the two rooms (anti-chamber): two large concentrations of tools were uncovered on the floor, one associated with plastered skulls and the other close to a paving. Due to the variety in types and the fact that most of these tools were intact, this deposit was interpreted by the excavator as intentional and indicative of a specific ritual of abandonment of that particular structure (Lechevallier 1978:144), and

b) in **Tell Ramad** detailed information about depositional variability is not available, but the excavator points to a rather clear pattern: in the first phase the majority of features seem to be concentrated inside the huts, while plastered skulls are kept outside, and in the second phase (level II) the reverse seems to be happening, with rectangular structures containing burials but no features at all, and most of the fixed features located outside (Contenson 1971:281-282).

This relation of burials to features and structures in general, is a very important one, but it has to be based on specific information about the location of each burial (a task which is not always very easy or feasible in archaeology). The present thesis does not examine mortuary evidence in detail, but the above patterns points to the potential of yet another field of investigation from a 'spatial' point of view.

Domestic space in period 4 (late PPNB)

- The variety in architectural forms is the characteristic of this period, similar to the previous one. Now the compartmentalisation of activities is greater, and the type and size of structures varies considerably.
- Although samples are disproportionate, sites in the north (Bouqras for example) indicate greater uniformity in terms of architectural types within a single site, than the ones in the south. This uniformity and standardisation is also evident on features, as now there are certain types for certain activities (Bouqras: ovens in the courtyard, hearths inside the house, El Kowm: three different types of hearths side by side etc.). South Levant displays a greater variety in terms of features, and patterns of standardization as they above are not very common.
- Fixed features are mainly found inside, and in depositional terms interiors are kept rather clean. Exceptions do exist, but it seems that artefacts when left behind are deposited intentionally in certain areas (see for example the case in Beisamoun, or Jericho and Mureybet in previous periods).
- Burials and plastered skulls are directly related to everyday life, as they are deposited both inside and outside the structures. Specific information about their location is not always available and comparisons would be therefore rather premature.
- In general the record is very fragmentary and no clear information is available about layouts, or exteriors. As a result it is very difficult to make any valid assessment about structural variability within or between sites.

Periods 5 and 6 (Obeid 0 and 1) (ill. 132, 133-141)

These phases are characterised by the introduction of pottery and the concentration, in terms of economy, on agriculture and stock-raising (Moore:1985:49-54). The number of sites now decreases and their distribution changes, as populations move westward and northward to settle in the forest zone. Moore sees this move as the result of environmental deterioration caused by population increase and need for fresh economic adjustment (Moore 1985:52). Rollefson however notes that southern Levant 'did not suffer a complete evacuation' at this period and inhabitants in some cases were merely driven to alternative ways of subsistence strategies (e.g. fully segregated pastoral vs. farming subsistence strategy).This changes would have as a result the segregation of big settlements, and their disperse into smaller populations that would easily escape 'archaeological visibility' (Rollefson *et al.* 1992:468).

As a result architectural evidence from these periods is rather scarce. The occupation layers from **Munhata** and **Jericho** consisted only of pit dwellings (Kenyon 1981:116, Perrot 1968:col. 415, Moore 1985:50) and although rectangular structures with one or more rooms were identified in **Ras Shamra** (VB and VA) (Contenson 1977:3-7, 1992) and **Byblos** (Neolithique Ancien) (Dunand 1960, 1961, 1973:10) by the north coast, they are now 'finished in less elaborate fashion' (Moore 1985:49).

It is also significant to note that during this period the dead are not disposed in the settlements any more (Moore 1985:50) and when they do, as in the case of **Byblos** (Dunand 1973:30-32), they are dug between the buildings and not under the floors of houses.

The sample from **'Ain Ghazal** is rather small but it has uncovered a broad courtyard wall and a number of small rooms (ill. 132). The size and shape of the rooms which have become very small now, have led the excavator to the suggestion that they were either basements or just for storage (Rollefson *et al.* 1992: 449-450).

In the following phase (period 6) excavation in **'Ain Ghazal** has uncovered an apsidal structure with fine ware and a large monolith in the centre of the wall arc; as this is the only example with plastered walls from the period, it seems probable that structural differentiation and the presence of 'special' structures still existed on the site during this period (Rollefson *et al.* 1992:451).

Domestic space in period 5 and 6 (PNA and PNB)

- The tradition of multiroomed rectangular structures, common in the north from the very early stages, seems to have spread and now continues throughout the Levant, but the information is too fragmented for detailed analysis. Fixed features inside the structures are rather rare, but judging from the different architectural types (see for example 'Ain Ghazal), structural and functional differentiation within sites must have been considerable.

5.3 Domestic space in Anatolia

5.3.1 Neolithic period and archaeological activity in Anatolia

Archaeological research in Anatolia focused initially on late historical periods. If Levant was the Land of the Bible, Anatolia's wealth on Hetite, Phrygian, Greek, Roman, and Byzantine monuments initiated a predominantly Classical trend and it was because of these monuments that European archaeologists of 19th and early 20th century were attracted to the area. It is characteristic that apart from Schlemann's work at Troy, very few other prehistoric excavations on the fringes of Mesopotamia were investigated around that time (Özdogan 1995: 46).

The state of preservation and the difficulty of detecting earlier deposits, which usually form very low mounds or are located at the very bottom of multiperiod tells, constitute undoubtedly some of the largest obstacles for prehistoric research in Anatolia (Özdogan 1995: 47). However, a very important role in the development of Anatolian archaeology was played by archaeological research itself and the way the Neolithic period was approached by the discipline.

Up until the mid 60s it was generally thought that Eastern Turkey was void of all kinds of human habitation (Lloyd 1956:53-54, Özdogan 1995:48). According to the first models Neolithisation was thought to have started at the lowlands of the Taurus mountains, an assumption which excluded most of Anatolia as a marginal zone to the homeland of the Neolithic formation. It is indicative that around the same years Gordon Childe in his attempt to find the route by which Near Eastern colonists reached Europe and considering Anatolia uninhabited, suggested a maritime route for diffusion (Childe 1957:36, 217, Özdogan 1995: 49).

When the first traces of Neolithic material were identified from sporadic recoveries early in the 20th century, and a number of sites in the vicinity of Ankara were uncovered by Turkish researchers during the 40s and 50s, suggesting the presence of a phase earlier than the Early Bronze Age, they were all faced with scepticism (Özdogan 1995:49). Near Eastern archaeologists were rather reluctant to accept a very early prehistoric phase for Anatolia. Exceptions however existed and Mellink pointed to some reasons for caution with regard to the 21m deep 'chalcolithic deposit' which was identified in the earliest strata of Alisar, Alaca Höyük (Özdogan 1995:49).

However, even after the 60s, when the discovery of new Neolithic sites (such as Çatal Höyük) along with improvements on dating systems (^{14}C), caused the collapse of traditional chronological sequences, no 'consequential interpretations were formulated concerning the role of Central Anatolia in the formation of Near Eastern Neolithic cultures' (Özdogan 1995:51). As a result Anatolian sites were merely displayed as spectacular oddities (Özdogan 1995:50).

It was only with Braidwood that the first systematic attempt to seek early sites in South-eastern Anatolia began in 1963 with the Joint Prehistoric Project (Çayönü) (Özdogan 1995:52). Braidwood introduced New Archaeology to Anatolia or rather Anatolian archaeology to

prehistorians, and according to his model for the origins of the Neolithic, parts of South-eastern Anatolia were considered for the first time to belong to the 'nuclear zone' of Neolithic habitation.

It is true, that in comparison to the overall archaeological activity in the Near East and South-eastern Europe the number of archaeological projects in Anatolia is minimal. However, as Özdogan puts it:

> 'during the last few years [meaning the 90s] a new trend, considering Anatolia as interesting, is apparent' (Özdogan 1995: 53)

and although 'the study of the Neolithic cultures of Anatolia is still in its infancy' (Özdogan 1995:55) now there is at least a constantly increasing number of projects conducted in the area. Some of the reasons for this 'new trend' could be: a) the pressure for further research which derived mainly from the new evidence that did not seem to 'fit' our explanatory models, b) political and economical reasons in the Turkish Republic, which eager for its 'European status' to be recognised, encouraged the investigation of earlier periods and the presence of foreign projects in the area, c) the abundance of projects in Levant and the need for 'fresh', unexplored (and 'unexploited') areas elsewhere. Whatever the reasons, it is becoming clear now, that Anatolia comprises a 'large cultural formative zone' with its own characteristics and with a parallel development to the one in the Near East.

The potential of Neolithic research in the area is undoubtedly immense and much of the terminology used so far will be gradually replaced. The distinction between PPNA and PPNB for example is already considered by some researchers to be irrelevant for Central Anatolia (Özdogan 1995:54). In the present thesis we follow the chronological frame already applied for Levant (Hours *et al.* 1994) in a conventional way and in the absence of a similarly comprehensive system for Anatolia alone.

5.3.2 Neolithic sites and the 'use' of domestic space

Despite its relatively recent history, archaeological activity in Anatolia has yielded very rewarding results. In the following analysis we shall examine the information available from nine sites in the area : Haçilar, Çayönü, Cafer Höyük, Can Hasan III, Suberde, Gritille, Nevalla Çori, Çatal Höyük and Mersin (ill.107).

According to the chronological frame adopted here, Neolithic sites are distributed in a span of four mainly periods and three thousand years: period 3 (8.800 - 7.600 B.C.), period 4 (7.600 - 6.900 BC), period 5 (6.900 - 6.400 BC) and period 6 (6.400 - 5.800 BC) (ill.2).

Period 3 (ill.142-146, 153-161)

Three mainly sites characterise this period: two very well preserved and extensively excavated from northern Syria: Çayönü and **Cafer**, and one from south-eastern Anatolia, which has been only excavated in small soundings and is less well preserved: **Haçilar**.

Çayönü seems to be one of the most extensively excavated sites in the area with 4654 m^2 excavated area which represents about 22% of the mound (Özdogan, A 1995:81). Excavation on the site is still in progress and for this reason the available information is rather fragmentary. Çayönü provides probably the longest sequence of occupation, characterised by five levels, each one represented by a different type of architecture and many rebuilding layers. Starting from virgin soil, the main architectural types for each level are: wattle and daub, grill-plan, intermediate level, cell-plan, and large room plan (Schirmer 1990, Özdogan 1989).

One should keep in mind that although generally each subphase seems to be characterised by a completely different architectural type, more detailed accounts of the material indicate transitional phases. Asli Özdogan's account of the site for example (Özdogan 1995:81) refers to seven subphases: round buildings (huts) subphase, Grill building Subphase, channelled building sub-phase, cobble-paved building sub-phase, cell building sub-phase, cell building/large room building transition sub-phase and large room building sub-phase (ill. 143). Furthermore, the assessment of the artefactual assemblage (Özdogan 1995:82) seems to indicate three different stages of development/change, each related to a different tradition: a) first stage: covering the Round Building sub-phase and a major part of the Grill building subphase and related to PPNA tradition; b) second stage: covering the last quarter of the Grill Building subphase and the first half of the Cell Building subphase and related to the PPNB tradition; and c) third stage: covering the second half of the Cell Building subphase until the end of the Large Room Building subphase and related to PPNC tradition.

As it would become obvious from the following review, these last divisions are very meaningful in terms of depositional behaviour and they display another example of why changes in artefacts and architecture should be considered in parallel.

No traces of a surrounding wall have been found on the site so far but due to the extensive excavation, a considerable part of the layout of the settlement is available. The most unique characteristic of the site is the great variety in architectural forms in each of its five subphases, and at the same time the uniformity that characterises these types within each subphase. Noteworthy is also the presence of one 'special' structure for each of the three main phases: grill plan, intermediate and cell plan, as well as the presence of large courtyards related to them.

Despite the fact that research is still in progress, and our knowledge about the site changes constantly and is regularly updated, the evidence revealed so far, does allow some assessment of the way domestic space was used, and could be summarised in the following (Schirmer 1990:365-376):

i) *wattle and daub level*: this level consists of round, single room structures, with stone foundations and wattle and daub superstructure. Daily activities were mainly taking place in the open areas between the buildings, and the deceased were buried either in pits in the open spaces between the huts or below their floors (Özdogan 1995: 84)

ii) *grill plan level*: this level was characterised by long rectangular structures, which were free standing and built at the same location and with the same orientation continuously. According to the

plan, their interior seemed to have been divided into three areas: one at the south end with small rooms, one at the centre with one large room and one at the north with numerous parallel narrow wall strips (grills). The numerous traces of wooden posts found within but also all around the structures, seem to point to a tent-like construction, with a light superstructure of organic material.

The only fixed feature recovered in this type of structure was a hearth in the corner of the central room. The grills must have supported a plastered floor forming a raised platform. The purpose of the southern part with the small rooms remains unclear.

In depositional terms the pattern is rather different from the previous round building subphase, as now it seems that grill buildings served the need for larger closed living spaces. During this phase, 'all kinds of activities, even flint napping, had taken place inside the buildings or just in front of the buildings' while the open areas between structures were used as 'garbage areas for unused animal bones, broken objects and for ash' (Özdogan 1995: 83).

In this particular phase characteristic is also the tradition of abandoning and 'burying' the structures with a layer of small pebbles, after 5 or 6 superimposed (consecutive) building layers; this process of burying the abandoned houses deliberately seemed to constitute a traditional habit during this phase, and lasted until the end of Cell building sub-phase' (Özdogan 1995:85)]

Finally one should note, that already from these early stages, some structures with distinctive and unusual characteristics make their appearance on the site. In this subphase, for example, the 'flagstone building' was recovered, which although half destroyed by erosion, seems to have retained some of its unique characteristics: two buttresses at the north wall and two large upright stone slabs (interpreted as support for the roof) aligned with them in the centre, small orthostats on the wall and probably a bench to the east;

iii) *intermediate level or channelled and cobble paved building*: This particular phase is not very well represented and rather disturbed. As a result the identification of the settlement pattern is rather difficult and the examples from which information is extracted limited. The plan of the structures, remains rectangular and free standing, but now it is built of stone walls which form 'channels' at regular intervals, sometimes covered with a solidly built stone platform. In other cases there are no traces of a platform and the channels/rooms are paved with pebbles (building DA, Schirmer 1990:369). The only feature identified in relation to this type of architecture, was a bench surrounding the structures.

During this period the settlement pattern and the depositional behaviour also change considerably (□zdo□an 1995: 85). Open areas, now, are not very significant, and special locations (e.g. western sector) are chosen in order to be developed into 'industrial area' specialised on different items, such as: different ornaments from various stones (malachite, copper, bone, shell), bone implements, flint and obsidian artefacts.

A 'special structure' was also identified in this period. It is now named the 'skull building', is characterised by many successive rebuildings, and is apsidal at least in one side. The main feature

of this structure is its cellar rooms which contain human skulls and are covered with large stone slabs. A large room or courtyard at a lower level than the floor above the cellars, contains upright slabs with a depression in the floor between them, and benches. At a later stage the floor was covered with plaster, had buttresses, and a large flat polished stone, probably serving as table. Primary and secondary burials were found together inside the structure, but also outside into pits (Özdogan 1995: 87). □zdo□an suggests that the existence of the skull building could be related to the practice of raising floors which might have had an effect on burial practices (Özdogan 1995: 84). At the end of this subphase the Skull Building was finally intentionally burned and buried (ibid: 87).

iv) *cell plan level*: this level is characterised by free standing rectangular structures, made of stone and divided into individual chambers of very small dimensions. Some are surrounded by benches and several have a platform-like annexe at one end (Schirmer 1990:370). Only one exterior door has been identified in this type of architecture and the floor of the cells was made of mud or sometimes stones. It is generally thought that these buildings had two storeys: a ground floor of small cells used for storage or working activities and an upper floor which provided the living space and probably was used for dry storage (Schirmer 1990:371). This reconstruction is also supported by a staircase which was found in association to a structure (Schirmer 1990:372). However, the actual use of the basements is still under debate, as for some researchers it is still unclear whether they were 'real' rooms or just airspaces (Redman 1983 :192). Whatever the case it is noteworthy that we are still dealing with 'individual buildings' as the basic community unit, and that now there seem to be more activities concentrated within each structure (Redman 1983: 193-194).

With the appearance of Cell buildings (during the second half of the second stage) the settlement pattern changes again, and the open areas between structures become smaller, while in general the size of the settlement seems to become smaller too (Özdogan 1995:86); Cell houses consisted of two storeys but the living area must have been now more restricted; 'domestic activities were taking place either within the houses -or on the roof' (Özdogan 1995:87). In depositional terms the inventories of the houses could be considered rather rich but ornaments were now found in smaller quantities (Özdogan 1995:87).

However, despite the reduction in size, one should note that during this period we have the appearance of the most elaborate 'plaza' (60 x 20 m) on the site, which was coated with reddish clay soil and had two rows of standing stones set into it. The plaza seemed to be an imitation of the 'special buildings', it had several floors and it must had been therefore a special function area (Özdogan 1995:87).

In addition to this 'plaza' there is also another special building from this phase, which is called 'terrazzo building'. This had a carefully laid red terrazzo floor surface, decorative buttresses, a depression in the floor at the north and unclear traces of roof which might be an indication that it was not covered. In general, relevant information is very fragmentary.

At the end of this subphase (beginning of stage 3 according to the division based on artefactual assemblage), we have a break in the long tradition of 'burying' the structures after their use and now buildings are in 'continuous use with renovations and annexes' (Özdogan 1995:88).

v) *large room level*: Information about this particular type is very limited, and the descriptions rather insufficient. Its main characteristic is large rectangular buildings without many partitions (Schirmer 1990:376). Now the plaza is not important any more and it seems to be kept for casual, daily usage. In this phase there is no homogeneity in forms any more, no 'common values', and according to Özdogan the society seems to move from 'communal' to 'personal ownership' (Özdogan 1995:88).

The other neighbouring site in the area: **Cafer Höyük** displays many similarities with Çayönü and provides an equally rich record (ill. 144-146).

Here one finds at least two of the architectural types known from Çayönü: cell plan and large plan structures. More specifically the site is divided into two sectors east and west. The occupation in the east displays a longer sequence. Starting from virgin soil, in the early phase there is a relatively small structure with two rooms, followed by a tripartite one of the megaroid type. The middle phase consists of cell plan structures, while the last phase displays structures with larger rooms. In the west sector large structures appear in parallel with cell plan buildings. As it was the case with previous examples, here again there seems to be an alteration in the way structures were used, starting as tripartite buildings (level X, XII) for habitation, and evolving into structures that had special areas reserved, probably for storage (cell plan buildings level: VIII (Cauvin 1989a:79).

Evidence for the boundaries of the settlement or its general layout is lacking, but in the west there were indications of a courtyard which was not however very elaborate.

In terms of fixed features the information is rather poor. The only example is a hearth inside the very earliest structure in the east sector. Apart from that, no other features were identified inside the structures on the site, except from some pavings in the cell buildings probably serving as footings for storage purposes (Yakar 1991:109). The west sector, which belongs to the latest phase provides some additional information: pit-ovens and hearths surrounded by paved areas, set in open-air outside structure 2. (Aurenche *et al.* 1985: 16, Yakar 1991:110)

Debitage was found in specific areas and ditches, and it is therefore clear that an effort was made on the site for refuse disposal to be kept away from habitation areas (Cauvin and Aurenche 1986:185).

The site of **Haçilar** (Mellaart 1970) displays a completely different picture (ill. 142). The sample is rather limited in size and the evidence is fragmentary. Only parts of structures have been revealed and these seem to have a completely different construction and form from the ones in the north described above: they are made of mud brick, and although difficult to say whether single-roomed or not, they seem rather spacious. Despite their fragmentary nature there are traces of plaster

floors, and hearths inside the structures. However the most characteristic feature in the site is its courtyard, which seems that at some point was surrounded by a mudbrick wall on a stone foundation, and concentrated the majority of domestic activities, judging from the variety of features revealed in it: hearths, ovens, bins, posts etc. (Mellaart 1970:4).

Unfortunately it is difficult to make out the layout of the settlement and in depositional terms the structures seem to be empty of finds although one should note that detailed information about refuse and debitage is missing.

Domestic space in period 3

- Evidence from the first Neolithic occupation layers in Anatolia indicates two different architectural traditions: one nearby the Taurus mountains and another in the south east.
- The sites in the north display a great variety in structural types while the uniformity of the characteristics of these types in each individual phase is remarkable. Redman (Redman 1983: 191) sees in these types attempts to cope with the demands of everyday life: in grill plan, an experimental design to facilitate storage, and in cell plan, an attempts to reserve space for intensification of production and 'some' specialisation. Regardless of the architectural differentiation however, up until the later stages 'individual buildings seem still to be the basic community units' (Redman 1983:192).
- Fixed features in general are lacking while abandonment processes and depositional variability vary considerably from phase to phase, not necessarily following changes in architecture.
- Structures play a very clear and distinctive (though varied) role in everyday life: in Cafer for example habitation and refuse areas are separated, while in Çayönü special structures are reserved for death-cults (skull building). The centre of domestic activities varies as well: outside in the first level with round huts, inside in the grill plan level, outside again in the intermediate level, and inside in the cell plan level (Özdogan 1995).
- In the south east the architectural tradition is completely different (structures made of mudbrick) and the evidence so far (Haçilar), indicates that a considerable number of activities were taking place outside. The record however, is far too fragmented during this period for any other assessment.

Period 4 (ill.147-149, 153-161)

For period 4 the sample is slightly bigger and the sites are again concentrated in the two areas: south-eastern Anatolia: **Çatal Höyük, Suberde**, and **Can Hasan III**, and north Syria: **Gritille**, and **Navalla Çori** both located at the bank of Euphrates.

The sites in the north bear some resemblances to the ones from the previous phase in the same area: in **Nevalla Çori** for example we have free standing, cell like rooms connected with doors,

similar to the cell plan buildings of Çayönü (Hauptmann 1987, 1988, Yakar 1991:65). However **Gritille** seems to provide a more sophisticated plan: it displays two structural types: one single and one multiroomed, which are spacious and adjacent to each other, and are associated with a courtyard defined by a mudbrick wall (Voigt and Ellis 1981, Voigt 1988).

In terms deposition the majority of artefacts came from outside, while structures from both sites were devoid of features: in **Nevalla Çori** the structures were surrounded by a banquette (following a similar tradition from Çayönü), while in **Gritille** a number of hearths were traced outside buildings. Nearby the courtyard in Gritille were also identified trash deposits (Voigt 1988:221).

The south-eastern area follows its own tradition, with spacious mudbrick structures consisted of one or two rooms, having access from the top, and being closely built together and separated by narrow alleys and courtyards. Identified in this period were the first phases from **Çatal Höyük** which revealed a limited number of domestic structures consisting of one or two rooms as well as a considerable number of special structures - 'shrines' (most common in the next period), characterised by a variety of elaborate features: wall paintings; plaster reliefs showing deities, animal heads etc.; horns of cattle set into benches; rows of bucrania and the presence of groups of cult statues found in the main room; ex-voto figures stuck into the walls, human skulls set up on platforms, etc. (see Mellaart 1967:78).

Can Hasan III (French 1968, French *et al.* 1972) and **Suberde** (Bordaz 1965, 1966, 1968:46, 1973), belong to the same tradition, of adjacent mudbrick structures and they do not provide evidence for special structures. Information from these two sites is very fragmented for any other kind of analysis.

Sites in this area display a considerable variety of features inside the structures, but the pattern is different from site to site: in **Çatal Höyük** for example the repertoire of features includes ovens, hearths, platforms and benches but no storage bins, in **Can Hasan III** (French 1972: 182) there are hearths and bins but no platforms and benches, and in **Suberde** (Bordaz 1968: 46-47) there are bins and benches but traces of hearths are only found outside. In terms of depositional variability published information is unfortunately very poor, but Mellaart describes a certain pattern from **Çatal Höyük** which is quite important: in earlier periods rooms were left clean and then filled with refuse, in contrast with later periods in which the fill was from solid brick and plaster (Mellaart 1966:169).

<u>The role of 'bounded space' in period 4</u>

- The sites in the north-east have more contact with Syria than Anatolia (Voigt 1981:98) and in architectural terms they consists of multiroomed structures or cell buildings close to the tradition of the previous phase (Çayönü). Their structures have no features inside and a considerable amount of activities seems to have taken place outside, in open air.
- The evidence from the south east is very different: settlements consist of groups of adjacent structures which are made of mudbrick, are divided by courtyards and have access from the top.

In contrast to the north, here structures contain a considerable number of fixed features and in their majority they seem to concentrate all domestic activities inside. Interiors are kept clean in terms of artefacts.

- Finally there seems to be an additional difference between the two geographical areas: among the sites in the south-east there is a uniformity in the types: all structures are made of mudbrick, and have one or two adjacent rooms; in the north however, there is considerable diversity in forms, between sites (Nevalla Çori: cell plan, Gritille: multiroomed) but also within single sites (Gritille : single and multi roomed structures). Unfortunately the available information does not allow more specific analysis about differences in the use of these types.

Period 5 (ill. 150-151, 153-161)

Two are the most characteristic sites from this period: **Çatal Höyük** in the south-east and **Mersin** in Cilicia. Despite their vicinity these sites have considerably different characteristics.

Çatal Höyük (Mellaart 1962, 1963, 1964, 1966, 1967) is the most extensively excavated site from the period and constitutes a type site for Anatolia in general (ill. 150). The layout of the settlement is quite clear with groups of structures made of mudbrick, courtyards, and alleys. The structures were single roomed or with small annexes, had rectangular or square shape and access from the top. Special structures similar to the previous phase were also here clearly identified. Although no surrounding wall, the outer walls of the structures at one edge of the settlement seem to form a barrier themselves. Furnishing inside the structures was quite rich with a variety of hearths, ovens, platforms, and bins. Occasionally in the annexes complete caches of tools were found, a pattern which must indicate a plausible area for storage. In general however, structures were rather empty of artefacts. Finally, another unique characteristic of the site is the considerable number of burials which were found under the platforms inside 'domestic' structures. Outside areas were very limited in use and often used for refuse disposal, only in one case ovens were identified outside.

Mersin seems to follow a rather different tradition (Mellaart 1967:24-25)(ill.151). The structures here have stone foundations and they vary in type and size from single to multiroomed structures (Garstang 1953:29). A court was partly revealed by the excavation and it was covered with a lime dressed floor. In terms of features and finds the deposits were rather poor, 'no domestic objects found within the walls (Garstang 1953: 29).

Domestic space in period 5

- Evidence from this phase comes from two sites: Mersin which does not provide information for its layout, and Çatal Höyük which displays a very well organised site with a considerable degree of uniformity in forms, features and layout. Mersin is completely empty of features, and shows an architectural variability (two different types) which is not common for Çatal Höyük. In general it is considered to have closer links to Syria, Palestine and the east (Mellaart 1967: 24-25).

- In depositional terms interiors were kept clean and refuse was deposited outside.
- Apart from the uniformity and regularity in forms and features, Çatal Höyük in general provides a rather clear picture about spatial arrangements. According to this, structures had a specific form and organisation, they 'housed' all domestic activities, they were kept clean, and they had restricted access. 'Shrines' had also certain features and the overall pattern of the settlement comprised of many repetitive standardised units (these being either the structures, or the shrines, or the courts).

Period 6 (ill. 152, 153-161)

This period is mainly represented by **Haçilar** in the south east. Its layout consists of groups of adjacent structures separated by courtyards (Mellaart 1970:11). The structures are rectangular with internal partitions, while outside there are kitchens separated from the courtyard by partition walls (Mellaart 1970:16). and have also controlled access. As evidence from staircases indicates some structures had upper storeys.

As far as the features are concerned one finds a rather standard repertoire in every house: hearths, ovens, bins, fire boxes, and benches (ill. 152). Depositional variability seems to vary according to the process of abandonment: in level VII for example which was abandoned: finds were confined in the courtyard deposits and houses were left clean (Mellaart 1970:11); in the next layer however (level VI) which was destroyed by a fire, the deposits from within the structures were much richer. Most of the artefacts were found in the screen off parts which were probably kept for storage (Mellaart 1970:14). Among the finds there was a considerable number of statuettes, figurines and incised slabs (Mellaart 1970:21), which are usually given a 'cult' meaning, but there distribution within structures seems quite widespread.

Domestic space in period 6

- The evidence from **Haçilar** points to a rather uniform pattern, with rectangular structures divided by one or more partition walls, and certain internal arrangements with standard features (hearth, oven, firebox).
- Activities were taking place inside the structures, but cooking was reserved in special enclosed areas outside the structures but also separated by the courtyard. They had therefore controlled access. Despite the existence of courtyards the evidence related to them is too fragmentary to provide information about their role in the community.
- Information about finds associated with structures also points to a uniform pattern, with the same more or less distributions and activities for every unit.
- The presence of staircases indicates the existence of upper storeys, a pattern which seems unusual if one bears in mind that the majority of activities seems to have taken place on the

ground floor. However, this pattern might be explained by the fact that benches are not very common on the site, and 'living quarters' might had been therefore reserved for upper storeys.

5.4 Domestic space in Neolithic Greece

5.4.1 Neolithic period and archaeological activity in Greece

It would not be an overstatement to say that Greek archaeology throughout its history has been 'haunted' by the Classical past of Greece and the way in which this was perceived and used, initially by the west (already from the beginnings of the 19th century), and later also by the new-born Greek state (Morris 1994: 8-47).

Recent developments in theoretical archaeology (within the realm of post-processualism and post-modernism) have helped significantly towards this realisation, and have stressed the influence that 'classical past' had in the 'formation' of research interests and practices in Greek archaeology. Evidence of such a critical approach towards research is seen in the increasing literature on the subject, which covers all related disciplines: anthropology (Herzfeld 1987), classical archaeology (Snodgrass 1987, Morris 1994, Shanks 1996), prehistoric archaeology and archaeology in general (Kotsakis 1991, Hamilakis and Yalouri 1996, Zois 1996). It has become therefore quite clear that the emphasis on classical archaeology was based on the search for a cultural (in the case of the western world), and national (in the case of Greeks) identity, which gave to Greek archaeology, both a 'nationalist' and 'imperialist' character (Kotsakis 1991:66).

Within this frame, the Neolithic period has had a very specific, but also somehow limited, role to play: specific, because it meant to indicate the 'continuity of a charismatic culture' (Kotsakis 1991:70), and limited, because the mere existence of 'few sherds' identified as Neolithic, was enough to fulfil such a purpose, and made any other question about the particular finds sound redundant.

This situation is exemplified by the archaeological activity and writings of the beginning of the century. During that period excavations were mainly conducted on classical, Minoan, and Mycenean sites (Gallis 1996:26). It was in these excavations that layers of the Neolithic period were first identified and later investigated independently in other areas. As for excavation reports, these were concerned mainly with chronology, and, at an interpretative level, were consumed in establishing links with later periods. Christos Tsountas, one of the pioneers of Greek prehistory, provides the most characteristic example of this attitude, in his concluding remarks on Neolithic architecture from Thessaly, by continually stressing the 'close relationship between the Neolithic "megaron" and the classical Doric temple' (Tsountas 1908:390-5).

In the following years (50s and 60s), intensive archaeological activity opened the way for a more systematic approach to the material, as a serious attempt had now to be made for the collection and presentation of the ever-growing body of the available data. D. Theocharis (1973) from Greece, and V. Milojcic (Milojcic 1960) from Germany, were two of the most influential figures of this

period, and one could say that with their excavations in Thessaly they laid the foundations of Neolithic research in Greece. Influenced by Childe's and Kossina's ideas, they both applied a 'comparative-typological' approach to the material, and although at an interpretative level were still focused on 'diachronic continuity' and chronological issues (Kotsakis 1991:72), they revealed considerable amounts of information, which constituted the basis for much of later research.

Around the '70s, prehistoric research in Greece found its way towards New Archaeology and the theoretical debates about interpretation. G. Hourmouziadis favouring a Marxist approach and sceptical about strictly typological methods (Hourmouziadis 1971), emphasised the importance of ideology (Hourmouziadis 1978) and interpretation in archaeological research. He approached cultural change as the result of concrete human action which was socially determined (Hourmouziadis 1979, Kotsakis 1991:76, 79) and opened a new era for Greek archaeology. At the same time, the influence of foreign archaeologists in Greece was also significant, in particular that of Colin Renfrew, who being himself one of the formative figures in British archaeology during the 70s, 'exposed' Greek prehistory to the new theoretical movements in archaeology at that period. His work on Cycladic prehistory (Renfrew 1972), and his participation in several excavations (Renfrew et al. 1986, Evans and Renfrew 1968) led the way to a new approach towards the archaeological record, with emphasis on themes such as subsistence, economy, production processes, trade, etc.

Recent years have seen an even greater involvement of Greek archaeology in the theoretical debates and the current movements (processualism, post-processualism) abroad. Processualism has been accepted with enthusiasm both in theory and method and its influence is evident in the writings (e.g. Grammenos 1988, 1991) and activities (e.g. Kotsakis: 1991:80, Gallis 1992), of many Greek archaeologists today. The specific historical background of archaeological research in Greece, as well as the lack of any comprehensive theoretical and methodological frame played a significant role in this acceptance of processual thinking. These are also the reasons why many Greek archaeologists express reservations about following post-processualism, the most recent movement in theoretical archaeology (see chapter I), because they see it, as a 'plea' to "return to concepts from which they had only just been freed" (Kotsakis 1991: 89).

However, despite all the important changes in the field, it seems that archaeological 'praxis' and reality in Greece has still a long way to go, in order to be able to articulate a more coherent and analytical approach towards the Neolithic past. Apart from the problems already mentioned, there are others related to the poor preservation of the archaeological record and the difficulty in getting access to Neolithic deposits because of the great number of multiperiod sites. Grammenos, referring to these issues and pointing to the lack of large scale excavations, states characteristically that in order to bridge the gaps, "prehistoric research in Greece should have to change completely and in every single aspect" (Grammenos 1990:224).

An interesting example of the very important stage in which Greek archaeology is today, is the publication of a review of all the archaeological material available so far, which came to light

only recently (Papathanassopoulos 1996) and is compiled by a great number of Greek researchers and experts in the field of Neolithic prehistory in Greece. This kind of synthetic work is of immense importance and displays considerable innovations in the way that the material is approached. Information about habitation, for example, is now separated from pottery, distinguishing the two fields in a way that was never done before. Additionally however, one should note, that this publication comes 23 years after the latest similar attempt by Theocharis (1973), is the result of an exhibition about Neolithic Greece, and has the form of a Museum catalogue rather than of an independent book. It is therefore a vivid example of the constraints under which Neolithic research has to operate, and the way in which it is traditionally introduced to the Greek public. Nevertheless, one has to point out that the recent emphasis on methodological processes and problems, as well as the critical approach towards current theoretical movements, are definitely indicators of an era of maturity and self-awareness for Greek archaeological research, which can only be positive for future developments in the field.

5.4.2 Neolithic sites and the 'use' of domestic space

Keeping in mind the background in which Neolithic research developed in Greece, it is now time to turn to the available information and examine the way in which domestic architecture and space was conceptualised and used in the area.

The chronological frame adopted here is based on the most recently published chronological review of the Neolithic material in Greece (Papathanassopoulos (ed.) 1996:30), set for the purposes of the present research in the wider frame of Near Eastern sequences (Hours *et al.* 1994). According to this, the Aceramic Neolithic period in Greece lasted for about three hundred years (6800-6500 BC), while the Pottery Neolithic constituted a much longer period, and is now divided into three main phases: Early (6500-5800 BC), Middle (5800-5300 BC), and Late: I (5300-4800 BC) and II: (4800-4500 BC) (see ill.2).

Aceramic period (ill. 162, 163, 177-185)

The extend and the nature of the Aceramic Neolithic period in Greece is still accepted with some scepticism (Gallis 1996:61, 1994:58), and the evidence related to habitation is rather poor. The most characteristic examples of this period come from **Knossos X** (Evans 1964) and **Argissa** (Milojcic 1962), in Knossos the evidence consists of habitation debris, pits and burials, while in Argissa there were identified at least six 'pit huts (cuttings in virgin soil) with post holes. The evidence is too fragmented for any kind of detailed analysis, and apart from a considerable variety of artefacts, the existence of fireplaces in Argissa seems to be the only other indication of domestic activity.

Early Neolithic period (ill.164-166, 177-185)

The Early Neolithic period provides a considerable amount of information. From the three sites examined here (Nea Nikomedeia, Achilleio, Knossos), **Nea Nikomedeia** is the most extensively excavated and provides sufficient information about the layout of the settlement.

The site itself is located in northern Greece, on the alluvial Plain of Macedonia, and consists of a low mound of approximately 24000m^2, from which 1900m^2 (12% of the total) have been now excavated (ill. 162, 164). The excavation was conducted by Dr. R. Rodden for the British School at Athens between 1961 and 1964 and was published in a series of preliminary reports (Rodden 1962, 1964c, 1965). Recently however, the first volume (stratigraphy and pottery) of the final publication of the site has been published (Pyke & Yiouni 1996). In this G. Pyke attempts a re-examination of the material published so far, and identifies three building phases, instead of the two initially suggested by the excavator.

Partly due to the poor preservation of architectural features, but also because of the belief that **Nea Nikomedeia** constituted a single phase site, this reinterpretation of the stratigraphic sequence in the settlement faced significant problems. First of all deposits were excavated by spit (of approximately 20cm thickness at a time), and consequently horizontal associations across the site had to be based on the matching of these artificial spits (Pyke and Yiouni 1996:30). An additional reason why this process proved to be problematic is the fact that structures seemed to appear between spits rather than at the bottom of each spit : the second phase for example contained structures which appeared 'in the upper part of spit 2 and the lower part of spit 1' (Pyke and Yiouni 1996:34). The recording system provides a third reason why any attempt to extract contextual information from this particular site should be approached with great caution : here, again, the distribution of finds is not reported according to a particular phase of occupation, but according to the square (grid system of 2x2m, or 4x4m) and spit (Pyke and Yiouni 1996:5-6) from which each object has been recovered.

Nevertheless, despite the problems, **Nea Nikomedeia** still remains the most extensively excavated early Neolithic site in Greece up to now, and the information it provides is unique. The settlement consists of square or rectangular free-standing structures, which are built mainly of posts and are divided into two or three rooms. There seems to be no considerable shifting in the habitation from phase to phase, and structures have been built in succession, overlying each other, in all the three phases identified in the settlement. Due to the type of material used for construction (posts) as well as later disturbances at the top of the mount (modern agricultural activity, Christian cemetery) there is only a limited number of structures that are completely preserved (Pyke and Yiouni 1996 :45-47) and as a result it is very difficult to examine changes in their size and type. However, a number of observations can still be made:

i) structures could be divided into three types, according to their internal divisions: one with no partitions at all usually of a square shape; one rectangular with two successive rooms and one with two partition walls which divide the space into one central room and two narrow elongated rooms at

either ends, ii) internal divisions are identified already from the earliest phase, iii) the smallest structures (of around 20 m^2) are mainly identified in the last two phases, and iv) there seems to be a considerable range in size for all three phases (phase 1: >25.58 - 160.68 m^2, phase 2: 18.28 - >101.67 m^2, phase 3: >8.14 - >80.92 m^2).

In general an overall review of the material in this period indicates a great variety of types and forms in structures. Information from the other sites is much more limited, but enough to show the variety within the same period.

In **Achilleio** structures were also free standing and made by posts but here they all conform to only one type, which is quite different from Nea Nikomedeia, with three rows of posts in the long axis, and no internal partitions (ill. 165). **Knossos** on the other hand, provides a rather different picture with multi-room complexes made of pise, or later of stone and pise (Evans 1964: fig 11, stratum VII). Although the small size of the sample does not allow the identification of complete structures and their relation to each other, it is obvious that Crete follows a completely different tradition in architectural terms (ill. 166).

Information about permanent features reinforces the diversity we see in architecture (ill. 181-182). **Nea Nikomedeia** despite its size and its structural variability does not provide much information about permanent features. Although 'ovens', 'hearths' and 'clay lined pits' have been identified, they could not be associated to any particular structure and as a result no real comparison between structures can be made. (Pyke 1993:200, Pyke & Yiouni 1996: 49-52).

The other two sites, however, provide considerable information. **Knossos** is remarkably rich, displaying a variety of features inside the structures (ovens, slabs, cupboards, pits) rather unusual for the period, although in the outside areas only pits and traces of paving have been identified (Evans 1964). **Achilleio** on the other hand indicates a different pattern, with the majority of permanent features (domed ovens, large circular hearth, paved areas, pits) outside the structures, and only fireplaces inside (Gimbutas *et al.* 1989:37, 40).

Especially in the case of **Achilleio** this difference between inner and outer space becomes even more striking in depositional terms. Although the 'post houses' yielded a considerable number of objects and tools (querns, blades, pottery disks, stone balls etc.), it is mainly outside that the majority of artefacts was found (Gimbutas *et al.* 1989: 36-42). Here apart from the numerous features mentioned above, there is also a considerable number of food - processing tools: querns, grinders, axes, blades, etc., as well as large concentrations of chipped stone tools and bone tools, many of which have been identified by the excavator as workshops (Gimbutas *et al.* 1989:40-42). Finally, it is significant to note that refuse (bone disposal) seemed to be 'as abundant in and around the house' as it was in the courtyard (Gimbutas *et al.* 1989:36, 40).

Knossos presents the reverse pattern. Although the information provided about space outside the structures is limited, it is nevertheless clearly stated by the excavator that 'house

interiors' were kept clean, with the majority of finds coming from the layers between floors (Evans 1964:166).

Unfortunately in the case of **Nea Nikomedeia** the evidence does not seem to be reliable. As G. Pyke indicates (Pyke 1993:176) 'due to the lack of correlation between the spits and the structural phases it was not possible to link the small finds with specific phases of occupation', and the same may be added for the rest of the finds. Attempts for the identification of the function of structures have been made of course in the past. The excavator himself based on the concentration and the type of an unusual number of finds in one particular building, suggested the existence of a shrine (group 4; see ill.164) and introduced the site to the literature as the 'European link with Çatal Höyük' (Rodden 1964a,b).

However, such attempts are more indicative of the history of archaeological thought in a particular era, than of 'real' evidence. M. Fotiadis (1993:157-159) has used the example of Nea Nikomedeia in order to demonstrate what he terms 'refined tactics' for domesticating 'truly unfamiliar objects', namely the process in which 'unfamiliar objects' had to be placed into 'familiar categories' ('shrine', in this case) in order to make sense. In his rhetorical question of whether those tactics have been successful or not in archaeology, the answer can only be yes, if we judge from the fact that, no matter how 'distilled' and 'purified' from 'emotional language' later descriptions about the site have been (Champion *et al.* 1984: 132, 142; Whittle 1985: 49, 51, 63), they all seem to recognise the existence of one structure in the site with different function.

One reason for the insistence on Rodden's model was undoubtedly the lack of a final publication, which transformed Rodden's initial interpretation to the only available 'evidence'.

Now that the first volume of the final publication is available, however, and one can have an insight on the nature of the archaeological evidence from Nea Nikomedeia, it is obvious that the above points should be approached with some caution (see also Grammenos 1996:43).

The main features that characterise the uniqueness of the 'shrine' in Nea Nikomedeia seem to be three: its size, its internal partitions, and the finds associated with it (Rodden 1964a, b, Champion *et al.* 1984:132, 142; Whittle 1985:49, 51, 63). Evidence from the final publication however undermines the validity of all three: i) the 'shrine' does not seem to be the only large structure in the settlement (see for example the structure of phase 2 in group 6), ii) its tripartite internal partition is not unique, and it also appears in other groups and phases on the site (in addition to this point, one should note that according to Pyke's phasing, the structure identified by Rodden as a shrine belongs to the very first phase and has no partitions at all (Pyke 1993:165) and iii) bearing in mind the recording system, the preservation, and the process of excavation, any claim to correlate finds with features in this particular site should be treated with caution.

Finally, and despite the difficulties, it is useful to be reminded in this context that in theoretical terms the archaeological record is often regarded as a 'network of resistances' (Shanks and Tilley 1989:44, Wylie 1992: 20, but see Hodder 1991:152), and in that sense the unique

concentration of finds in a particular area in the site does seek an explanation. Pyke (1993:171-176) dealt with this issue at length, discussing all possible interpretations of such a concentration: production, use, storage or dumping, and although no conclusive results could be reached, she undoubtedly has pointed to the right direction in which these problems should be approached. It seems that in this particular case, the 'resistance' to our 'overdetermined presuppositions' (Wylie 1992:26) does not only come from the finds but from the nature of the archaeological record as well.

Domestic space in the Early Neolithic

The most characteristic element of domestic space in this period in Greece therefore seems to be its diversity both in architectural forms and patterns of behaviour. Despite the limited size of the sample, and the fact that in geographical terms the sites seem to be distributed quite evenly: Nea Nikomedeia in the north, Achilleio (Thessaly) in the centre of Greece, and Knossos (Crete) in the south, there are considerable differences between mainland Greece and the island of Crete, as well as the sites in the mainland alone.

- In structural terms, Knossos comprises the most complicated example, with complexes of multiroomed structures built mainly on stone foundations, while mainland (Achilleio and Nea Nikomedeia) is characterised by free-standing structures made by timber frames ('post houses'). This last type is further differentiated into the simple 'post huts' from Achilleio, and the more complicated ones in Nea Nikomedeia with internal partitions.
- In terms of the actual use of structures, and depositional variability the evidence points into two completely different patterns: On one hand **Knossos**: which was equipped with a variety of permanent features: for the preparation of food (ovens, hearths), for storage ('cupboards), and for working or resting (slabs/pavings). Evidence which indicates a concentration of domestic activities indoors, rather than outside, where the most common features seem to be only rubbish pits. This pattern was followed by a specific behavioural pattern in which interiors were clean in depostitional terms and were kept empty from any kind of artefact or refuse (Evans 1964). In **Achilleio**, on the other hand, the majority of domestic activities seem to be taking place outside in the courtyard, where a variety of features have been found: plastered paving, benches, ovens, hearths, pits etc., while 'post houses', were only equipped with fireplaces. Behavioural patterns are also indicative of this rather 'loose' role that structures were playing because now occupants seem to pay little attention to refuse disposal, and animal bones were as abundant in and around houses as they were in the courtyard (Gimbutas *et al.* 1989:37).
- The evidence from Nea Nikomedeia is rather unsuitable for any attempt to detect behavioural patterns, and in conclusion one can only point to its remarkable layout, according to which structures seem to occupy roughly the same location throughout the life time of the settlement. This pattern has been also observed later in other sites (Sesklo-acropolis, Otzaki, Dimini) and it is often interpreted as an indication of ownership of land (Halstead 1989:76, Kotsakis 1994) and

furthermore, as an example of the reflection of family households into specific residential units. The presence of three quite distinctive structural types, in terms of partitions, which appear in all three sites worths further notice, but the information is unfortunately too poor for any attempt to identify differences in their role and use.

Middle Neolithic (ill.167-173, 177-185)

Middle Neolithic period provides a larger sample, and the analysis is now based on seven sites: **Servia**, **Achilleio**, **Sesklo**, **Tsangli**, **Otzaki**, **Knossos**, **Katsamba**. **Sesklo** constitutes the most extensively excavated site from this period (ill. 167). Its first publication (Tsountas 1908) in the beginning of the century provided rather limited spatial information while the publication of the most recent excavations and the re-examination of the older material, is still pending (Kotsakis 1996).

Settlement layouts can be detected by Sesklo, and partly by Otzaki, Achilleio, and Servia. In **Sesklo** there are traces of a surrounding wall (Tsountas 1908:75) which probably served multiple purposes: separating the settlement from its natural environment, retaining the soil of the slop and controlling access to the site (Kotsakis 1996:52). Recent excavations have revealed that during the same period the settlement expanded beyond the acropolis (Kotsakis 1994: 126) and in this case the wall should be probably also considered as a 'defining' line between two communities.

The area outside the acropolis was excavated in the 70s by Theocharis and with the publication pending (Kotsakis 1996) it would be rather premature to attempt any kind of reconstruction of the spatial arrangement between the two communities. However preliminary reviews (Kotsakis 1996, 1994) suggest the existence of two different patterns: one for the acropolis (Sesklo A), with intensive habitation, continuous occupation and free standing structures, and another one for the flat terrace in the south west of the acropolis (Sesklo B) with shifting habitation, discontinuities in occupation and densely built, adjacent structures (ill. 168). This pattern seems to be reinforced also by differences in the production and distribution of ceramics between the two areas as in area A there is a greater concentration of painted ware (Kotsakis 1994:129, Maniatis *et al.* 1988).

As far as the layout of other sites is concerned, the majority consists of free standing structures, with the exception probably of Knossos (Evans 1964) where the evidence seems to support the idea of complexes of adjacent structures. **Otzaki** (Milojcic 1983, Milojcic *et al.* 1971) should be also singled out because it is very densely built and is characterised by exceptionally narrow alleys separating the structures.

In terms of construction, buildings made of stone and pise are more common now (Sesklo, Tsangli, Knossos, Katsamba) but the tradition of post huts does continue in some areas (Servia, Achilleio), while there is also one case where structures were built solely out of pise (Otzaki).

Internal partitions are also evident, and vary considerably from one site to the other: in **Achilleio** the 'post houses' continue for a while, but they are soon replaced by a different type of structure, with stone foundations, pise superstructures and habitational space divided into two rooms (Gimbutas *et al.* 1989) (ill. 170-171).

Sesklo is characterised by a variety of types, both free standing and adjacent, with single rooms or successive of the 'megaroid type' (Tsountas 1908, Theocharis 1973, 1976). Despite the fact that the range in the size of these structures seems to be considerable (10-50 m^2) (Kotsakis 1996: 52), the lack of detailed information does not allow further analysis about possible associations between size and function.

Servia consists mainly of post houses, sometimes with two rooms, and provides also a unique example of a structure with a basement (Ridley and Rhomiopoulou 1972, Rhomiopoulou et al. 1973, Ridley and Wardle 1979). The same kind of arrangement, with the expansion of space at a vertical axis, can be also seen in **Tsangli** (Wace and Thompson 1912) and **Otzaki** (Milojcic *et al.* 1971, Milojcic 1983) where the presence of internal buttresses is often equated with a second, upper storey (Whittle 1985:51 commenting on Otzaki, Tsangli). **Otzaki** apart from structures with buttresses displays a greater variety in architectural forms, with structures without partitions at all, or others with an additional portico in front of their entrance.

The evidence from **Knossos** is too fragmented to provide a clear picture of the structural units on the site, but it seem to follow the tradition of complexes of rooms (ill. 172). Another site in Crete, the site of **Katsamba** provides a rather complicated plan, of the type that is usually termed 'but and ben' (Alexiou 1954, see also Dawkins 1905). This is a type of agglutinative architecture with cells added to an original plan, but the lack of any information about the site in which the structure belongs and about details for its internal arrangements, does not allow any assessment about its role at a community level (ill. 173).

Although it has been suggested that a considerable number of domestic activities, such as food preparation and storage, were taking place within the structures at **Sesklo** (Kotsakis 1996:52), without specific information for each structure, it is difficult to discuss about variability in domestic use. However preliminary reports, do refer sometimes to specific examples (Theocharis 1976:154-156, Tsountas 1908: 52, Kotsakis 1981), which allow insights to the way space was organised. In general it seems that a considerable number of working activities and storing facilities were housed inside the structures while cooking facilities where usually located in open yards between houses (Theocharis 1980, 1971, Halstead 1989:74). Furthermore, in depositional terms the record seems to be quite rich, if one judges from the case of the 'potter's house' inside the acropolis (Tsountas 1908:52), or the numerous cases of wealthy deposits found outside the acropolis (Theocharis 1976:154-157, Kotsakis 1981:94). Without any additional information however, it is very difficult to come to any conclusions about patterns of behaviour in depostitional terms.

Tsangli also presents evidence of storage inside the structures (Wace and Thompson 1912) but no traces of a fireplace. It seems therefore that here as well as in **Otzaki** cooking facilities were taking place outside in open yards (Milojcic *et al.* 1971, Milojcic 1955:168).

In **Achilleio** benches appear for the first time into the structures, but domestic activities (hearths, plaster floors, pits) in the courtyard still seem to be quite intensive. In general domestic activities of all kinds were taking place both inside and outside the structures in this period, although one should keep in mind that the great variety of 'fireplaces' outside (ovens, hearths, etc.) might indicate that cooking was taking place in open-air (Gimbutas *et al.* 1989:61), as was also noted for some sites in the Middle Neolithic (see above). Structures are kept relatively cleaner now, with much of the refuse thrown in the courtyard (Gimbutas *et al.* 1989:59). This process was already noted in the post houses of this phase which contained less debris compared to the ones from the previous phase, and reflect therefore a different depositional pattern despite their similarity in shape (Gimbutas *et al.* 1989:53)

Maria Gimbutas (1989:57,61), based on the abundance of roasting activities outside the stone houses, their innovative form after a tradition of post houses, the considerable number of finds (figurines, spindle whorls, pottery disks, clay balls, blade tools , pottery etc.) associated with them, and the lack of food processing equipment found indoors, identified the structures as 'shrines'. However, one should approach such an interpretation with some caution, because: i) cooking outside seems to be a common practice in middle Neolithic and it was also evident in the previous period on the same site, ii) the type of the structure (stone foundations, two rooms) although new, seems to be rather common in this particular period, and iii) the distribution of figurines is more widely spread and is not exclusively observed in this type of structures (see also Gallis 1996:63).

Information from **Servia** is more fragmented. However, a great number of domestic activities (hearths, paved areas) seemed to have taken place outside while according to the excavator, floors were kept 'scrupulous clean' (Riddley and Wardle 1979: 197) and refuse was accumulated in exterior areas. Additionally, in a distraction layer of one of the structures, a basement has been recorded, full of storage jars and seeds (Riddley and Wardle 1979:200).

Finally **Knossos** retained its old pattern of the considerable variety of permanent features within the structures, and floors were left almost 'empty' in terms of finds. So much so that Evans was lead to suggest (Warren *et al.* 1968:268) the indication a ceremonial aspect for the 'votive pottery pits' which were found at the top of a destruction level of a house (house A) in phase III. Another example from Crete, the structural complex in **Katsamba**, has yielded a considerable amount of tools but no permanent features. One should also note the concentration of animal bones (goat, cattle and sheep) in the area to the north which is interpreted as a yard because of its loose plan and the large entrance (Sakellarakis 1973: 131, Alexiou 1954). Again as noted before, without any information about the rest of the site, it is very difficult to talk about the role of structures and the way they were used. If the finds can be really associated to the floors, then they point to a different

depositional behaviour from the one observed in Knossos. In that case, one could suggest differences in abandonment processes between sites of a different size or even social structure.

Domestic space in Middle Neolithic

The majority of sites examined in this period comes from central Greece, more particularly Thessaly (Achilleio, Sesklo, Tsangli, Otzaki). However, here again there is a great diversity in forms and domestic use, both among the sites in Thessaly and also among sites in the north (Servia) and the south (Knossos, Katsamba).

- Thessaly displays a variety of structural types: post houses, structures with stone foundations, pise structures, along with a variety of internal partitions: multi roomed, single roomed, or structures with an upper storey. Sometimes, there seems to be variability within the settlements themselves, either in terms of construction: as in the case of Achilleio, where post houses were replaced by structures with stone foundations, or in terms of internal arrangements: as in case of Sesklo, where there are both free-standing and adjacent structures. Knossos follows its old tradition of more elaborate forms with complexes of rooms, while Servia in the north retains the tradition of post houses.
- In terms of the actual use of structures, activities about the preparation of food now seem to move inside the structures. Storage facilities are taken inside and in one case (Servia) a whole area (basement) is reserved for this purpose (Halstead 1989:71). Outside space is still important in terms of cooking however and as Halstead has pointed out: in contrast to uncooked food which seems to become now 'private property', cooked food is shared (Halsead 1989:74).
- In parallel with this increasing importance of built space seems to be also a behavioural pattern in depositional terms: the more central to domestic activities a structure becomes, the more clean is kept (or abandoned). Knossos had this pattern already form the previous period, but Achilleio provides the most striking example, especially in comparison to its previous phase, in which depositional behaviour was exactly the opposite. Depositional information from the other sites is too fragmented but the lack of rich deposits points to the same pattern.

Halstead relates this observation about storage facilities with an economic model, of family households as the basic unit of production and consumption suitable for early farming communities (Halstead 1989:72) and suggests that one way of coping with scarcity at an annual term is the exchange of surplus food between households (Halstead 1989:73).

Moreover, Kotsakis commenting on the layout of Sesklo and the difference in habitational space between area A and B, suggests that the dual pattern might relate to social and economic structures and that the 'restriction of the intensive exploitation of space at the Acropolis of Sesklo discloses the existence of a social hierarchy capable of controlling the intensification of production over the rest of the population' (Kotsakis: 1994:129).

In spatial terms however, one should also note that despite the differences in ownership or access that the pattern might indicate, it does not indicate standardisation in domestic use at least in terms of forms because obviously without detailed information differences between structures in functional terms cannot be observed.

Late Neolithic (ill.174-176, 177-185)

From the five sites examined in the following analysis: **Dimini**, **Sesklo**, **Saliagos**, **Knossos**, **Magasa**. **Dimini** is the most extensively excavated and constitutes the type site for the period. The initial excavation in the beginning of the century (Tsountas 1908), was followed by a re-examination of the material in the 70s which led to the recovery of valuable additional information (Hourmouziadis 1979), but its details have not yet become available in a final publication.

The most characteristic feature of the settlement is its six concentric surrounding walls, which initially were interpreted as defensive walls (Tsountas 1908:35-48), but later Hourmouziadis suggested that their primarily use was to serve as 'internal boundaries'(Hourmouziadis 1979: 59-96), separating different domestic areas within the settlement (ill. 174). Five of these domestic areas have been identified on the site, one in the central courtyard at the top of the mount, and the other four around its slopes.

It is important to note that in architectural terms the layout of the residential units, is much looser and although they are defined by surrounding walls their internal arrangements are not formalised. It has been suggested that this restriction to access, as well as the contrast to the open nature of the settlements in early Neolithic, indicates some changes in the social unit from family to larger households, 'units which collaborated in the production and storage of food and shared in its consumption' (Halstead 1992:53, Kotsakis 1996:55); perhaps extended family households or a 'courtyard group' (Flannery 1976:75; Halstead 1989:76).

The tripartite structure of the megaron type at the top of the mount, is another characteristic feature of the site. The date of this structure has been questioned by Hourmouziadis (Hourmouziadis 1979: 96-110) who suggested that it might belong to a later date, and might cover a structure of a simpler form similar to the domestic areas at the slope. Such an interpretation would implies that during this period, there was no central structure or some kind of 'central' authority in the settlement, and the central courtyard therefore, had free access and a communal role.

Hourmouziadis' attempt to re-examine the stratigraphy of the particular building is a good example of the importance of stratigraphy in archaeological reconstructions, and one should add that his model is also supported by the recent research on the distribution of the faunal evidence (Halstead 1992), which showed no difference in the animal exploitation for the central courtyard, compared to the other residential/domestic units. However, the difficult task of re-examining stratigraphic sequences as well as the fact that megaron type structures appear in this period also in other sites (Sesklo, Agia Sofia, Visviki), suggest great caution in excepting Hourmouziadis' model

(see Halstead 1981, 1992). Having said that, one should keep in mind, that Dimini is the only case which provides a full layout of a settlement in the late Neolithic and the only that allows some kind of association between the megaron and its surrounding. Sesklo provides a very impressive megaron and a surrounding wall but no other information and the evidence from the other two sites (Agia Sophia and Visviki) in the period is too poor for any detailed assessment.

Saliagos provides a similar, but less elaborate example, with a perimeter wall and compartments attached to it (Evans and Renfrew 1968:23) though no megaron is identified. Evans mainly judging from the size of the compartments and the lack of entrances has characterised the area not habitational (Evans and Renfrew 1968: 25), a hypothesis which unfortunately can only be verified by the absence of material, as the evidence is too poor.

Knossos finally provides limited information but a quite elaborate plan, with separate space for storage and a large number of rooms (ill. 175). The existence of two structures with the same features and layout, seems to indicate a move towards standardisation. **Magasa** although very fragmented provides a completely different example, and a much simpler form (but and ben) compared to that from Knossos (ill. 176). Unfortunately the lack of any information about the settlement in which it might belong, does not allow further comparisons.

Each domestic area at **Dimini** was equipped by a considerable number of storage and cooking facilities (Hourmouziadis 1979: 110-160). Permanent features were identified both inside and outside the structures (Hourmouziadis 1979: 135) and the diversity of the plan seems to point also to diversity of activities. This is a case in which open areas seem to be included/incorporated in habitational areas, and there is no clear limit between built and unbuilt space. In **Knossos** (Evans 1928) the information is too limited for outside space, but one should note the considerably elaborate hearth in both surviving structures. Depositional variability is low but special small areas are now reserved for storage.

In general storage facilities appear to be characteristic for that period at a great extend (coarse ware, Halstead 1989: 75) and are usually located outside the structures (see also Saliagos, Agia Sofia, Servia) (Halstead 1989:75). However, attention should be drawn to the fact that in all the above cases big storage pits have not yet been associated with specific structural complexes.

With regard to depositional variability in general there is not much information available. In Knossos very few finds but storage jars, in **Magasa** a concentration of tools. Judging from the lack of any reference about artefacts deposition in this phase must have been rather low.

Domestic space in late Neolithic

The sample for this period is relatively small and comes from three mainly areas in Greece: Thessaly (Dimini, Sesklo), Cyclades (Saliagos), and Crete (Knossos, Magasa).

- The layout of the settlements, where available, indicates a greater 'communal spirit', in the sense that domestic space seems more organised, and better defined and controlled, with

courtyards, surrounding walls, and residential 'boundaries'. However, one should note that in terms of function and activities, standardised forms and types of structures are lacking.

- Characteristic in this period is the appearance of megaron type structures at the top of mounds, in a considerable number of sites (Sesklo, Dimini, Agia Sophia, Visviki). Information related to these structures however, is fragmented and the only site that provides a satisfactory layout is Dimini, which so far indicates very limited differentiation between the evidence from the slopes and the mount.
- Crete and particularly Knossos, remains unique in its characteristics, as it displays structures with an elaborate plan, storage rooms and considerable structural order and uniformity. Information is very fragmented, but it seems that in terms of depositional variability is also different. Although in the rest of the sites in Greece, scatters of artefacts constitute a common 'feature' associated to floors, in Knossos, finds are very few and even fixed features are usually rare.

Commenting on the case of Dimini and the megaron type structures in Greece, Halstead suggested a model of institutionalised inequality for the settlements in this period: a megaron elite and a growth of population that undermined earlier household populations favouring courtyard groups and over-production. He claimed that intensification in storage 'indicates storage of surplus for immediate requirements, e.g. for exchange (Halstead 1989:75-76), and talked about a ranking society which had access to surplus in quantitative terms and not necessarily in basic resources (Halstead 1992:56), and as a result had also preferential access to labour and production, access to positions of status and preferential access to similar high - ranking persons or households in other settlements. However, as it became obvious, information is too fragmented, and the only evidence for inequality in Dimini, comes from the megaron at the top of the mount, the date of which for some researchers remains under doubt (Hourmouziadis 1979:91).

5. 5. Domestic space in Neolithic period: Levant, Anatolia and Greece

In summarising the evidence related to the way domestic space was used in the Eastern Mediterranean and in particular in Levant, Anatolia and Greece the following points should be kept in mind:

a) *Levant*:

Levant is characterised by two different patterns in terms of structural variability, one in the north and the other in the south. Already from the earliest period buildings in the north were rectilinear and multi-roomed and due to their complicated layout, it has been very difficult for archaeologists to detect their residential boundaries. Quite the contrary, in the south, structures had initially the form of simple round huts with no internal partitions, and although later they became rectangular, they seemed to retain a rather 'simple' shape, being mainly free-standing. In general throughout the Neolithic period, the south moves towards standardisation of forms and functions at

a slower pace than the north, and displays a greater diversity in architectural types within and between settlements, compared to the tendency for uniformity in the north.

In terms of the location of permanent features and activity areas, there are again two patterns. The majority of features in the north was located inside the structures, and some compartmentalisation in activity areas seemed to have existed already from the earliest period. In the south, however, the limits between built and unbuilt space were rather vague in the beginning, and domestic activities were taking place both inside and outside the structures. Having said that, sites in the south, especially in the later phases, also display some degree of standardisation, if one judges from the 'megaroid' type' structure which contains a specific type of features (hearths) in a specific location (central room).

In depositional terms structures in the north are kept 'clean' right from the earliest phases. For the south however, this pattern is identified much later and in the beginning a considerable number of artefacts was left on the floors. Certain abandonment processes are also evident in the record, as for example the deposition or abandonment of artefacts on specific locations related to working areas (Mureybet, Abu Gosh).

Unfortunately information from the north is not available in detail and as a result apart from pointing to the standardisation and repetition of certain forms, it is difficult to make any other more specific statement about spatial arrangements, social structure and differentiation. In the south however, evidence is more abundant and variable. In the earlier stage structures were differing considerably in size and furnishing, and the layout of settlements pointed to rather loose planning social arrangements (see for example the 'compound like' layout of Gilgal). Later however, with the presence of 'special structures' (e.g. Beidha, 'Ain Ghazal), and the appearance of repetitive structural forms (megaroid structures, and corridor structures), societies in the south provide clear evidence about the existence of social units which are based on a 'nuclear family' structure, as well as structural and probably social differentiation which now, in contrast to earlier periods seems to be standardised and institutionalised.

b) *Anatolia:*

In Anatolia there are also two patterns: one in the south-east and the other in the lowlands of the Taurus mountain. The difference however, is more striking here because both areas display an equally standardised layout but of a different type: rectangular free-standing structures made of stone and pise in the Taurus, with several partitions and a very uniform pattern in every subphase; and adjacent mudbrick structures in the south-east, with no more that two rooms in each house, and access from the top. The sites around Taurus were abandoned after PPNB while in the South-east occupation continues through out the Neolithic period.

Evidence about fixed features and the location of domestic activities is quite abundant in this area. In the south-east the abundance of features inside the structures (hearths, ovens, platforms,

bins) indicates that the majority of domestic activities were taking place indoors, while open areas, although explicitly defined, seemed to have been restricted in domestic use. In the north, evidence comes mainly from the earliest phases of the Neolithic period, and points again to the concentration activities indoors, while in the case of Çayönü, the location of activities, changes regularly, and moves from outside to inside, according to subphase.

In depositional terms interiors seem to be kept clean and disposal of refuse is taking place usually away from habitation areas, in specific locations (usually courtyards, or ditches).

Some degree of structural and probably social differentiation is also evident with the presence of special structures (Çayönü), and shrines (Çatal Höyük) in the settlements. 'Regular' structures however, show remarkable uniformity. Finally, as far as the structure of the social units involved is concerned, the clearly defined and repetitive structural units, present in the majority of the sites in the area seem to indicate the presence of nuclear or extended families.

c) *Greece*:

In Greece there is a great variety in structural forms and spatial arrangements: from post-huts, mainly in the early phase, to rectangular structures made by stone walls and pise in later phases. Buildings were divided into rooms already from the earliest period and although initially they were free-standing (Nea Nikomedeia) gradually they appear in groups (Dimini). Surrounding walls also appear in the last phase.

Initially there seems to be a loose distinction between inside and outside space, and in the case of Achilleio domestic activities take place mainly outside. In the last phase however, structures have a more central role in everyday life and there are examples in which open areas surrounding them are walled off and controlled (Dimini).

In terms of deposition there is a similar tendency with the other areas, according to which interiors are left 'clean' especially in later periods. In general however, published evidence is limited and apart from some exceptions (Achilleio, Knossos) it is very difficult to make assessments about depositional patterns within and between sites.

Crete stands out as an exception and should be noted separately. Its uniqueness lies in the fact that from the very early stages it displays characteristics which in all other sites in Greece, appear much later: it has rectangular architecture right from the beginning, and its structures consists of many rooms, with a considerable variety of fixed features, and 'cleared out' interiors.

Halstead (1992) in his analysis about Late Neolithic in Dimini, based on the appearance of 'megaron type' structures and their prominent location, suggested that one might see in this period the first traces of an emergent elite. However, as already mentioned, differentiation in this particular site is not supported by the distribution of finds and structural evidence is rather problematic.

In general Greece does not provide very concert evidence for differentiation is structural and social terms. Although indications of differentiation do exist, as for example the difference in the

settlement pattern in Sesklo, or the presence of the 'megaron' in Dimini, further information is necessary in order to have a basis for reliable interpretations and reconstuctions. What is remarkable however, is the fact that already from the earlier periods (Nea Nikomedeia, Achilleio) clear evidence for individual households is available, and judging from their repetitive structural forms, social units must have been based on nuclear or extended families.

CHAPTER VI

SYNTHESIS - CONCLUSIONS: IDENTIFYING DOMESTIC SPACE IN THE NEOLITHIC EASTERN MEDITERRANEAN: PRESENT ANALYSIS AND FUTURE RESEARCH

> "...an archaeological cultural context, by the very nature of the basic materials, is constructed by inference to a greater extent, perhaps, than contexts based on written or living sources. *But there is no other means to construct them*, and without contexts there is no way either to write history or study culture."
>
> Taylor Walter 1948: 114-115

> "The postmodern reply to the modern consists of recognizing that the past, since it cannot really be destroyed, because its destruction leads to silence, must be revisited: *but with irony, not innocently*."
>
> Umberto Eco 1994: 67

The present thesis focuses on the processes of the identification of the use of domestic space in the archaeological record. Its starting point has been the general theoretical and methodological context from which studies related to spatial issues evolved, in order to gain a better understanding about the ways archaeology itself operates and deals with synthetic questions such as the use of domestic space. The methodological process followed was both cross-cultural and contextual, because it seemed necessary to view interpretative and methodological issues related to the problems under examination, from a detailed but also general perspective. The cross-cultural aspect of the analysis aimed to show: a) changes in human behavior with regard to the way domestic space was used in the past, and b) differences in the way archaeologists approach the record and effect with their practices, its potential to provide information about the past. Contextual analysis on the other hand, having similar aims, approached the evidence from a different point of view and concentrated: a) on the specific problems of the identification of the way domestic space was used in Neolithic period and b) on the type of information that is needed for the study of these kind of issues.

Within this analytical framework, the research focused in particular on the area of the Neolithic Eastern Mediterranean, seeking to investigate: a) the way in which domestic space was conceptualized and used in Neolithic sites and b) the degree up to which the available archaeological information is sufficient to deal with this kind of questions.

The analysis was mainly conducted at a microscale level, which refers to structures, and the features and finds associated with them. Additionally it dealt with the role and position of structures

within the settlements, in an attempt to stress the importance of viewing archaeological material at a wider context. The study has been quite rewarding in several aspects: it has highlighted many of the inadequacies and potentialities of spatial information in archaeology, it has pointed to the fields in which archaeologists should work more in order to achieve a better understanding of their material and the past, and it has suggested alternative directions for future research.

The purpose of the present chapter, is to summarize the main points that have resulted from the above analysis. The results touch upon several issues, which could be divided into four main categories:

i) at a cross-cultural level: the way in which domestic space was used and formed by different societies in the Neolithic period,

ii) at an interdisciplinary level: the impact that archaeological analysis could have on anthropological models, and its contribution towards strengthening the dialogue between the two disciplines,

iii) at a methodological level: the limits and potential of microscale analysis and synthetic studies such as the use of space for future archaeological research,

iv) at a theoretical level: the role that archaeology is called upon to play at a post-processual era, and the need to view itself from a more 'realistic' and critical point of view.

6. 1 Domestic space in the Neolithic Eastern Mediterranean

One of the main advantages of a cross cultural approach is its capacity to highlight differences and similarities between comparable units at a wider scale, and in that sense identify patterns which otherwise could have been difficult to detect. Its usage in the present thesis has shown the diversity in the use of domestic space during the Neolithic period in the Eastern Mediterranean and most importantly has made clear, that apart from similarities and differences, in forms and styles one can also examine diversity in terms of behavior, which provides an ideal theme for cross-cultural studies. This kind of more holistic question, such as the way in which the built environment is used and transformed by human behavior (and at the same time also transforms human behavior as well), bring archaeology and anthropology closer together, and indicate changes that might cross-cut geographical, chronological and even some times cultural boundaries.

The review of the material in the Neolithic Eastern Mediterranean illustrates a great diversity in the way societies used and divided their built environment in the Neolithic period. Discussion about this diversity in each particular area is undertaken in relation to the specific chapters in the thesis. The following paragraphs will refer instead to some cross-cultural trends which are indicated in the above analysis.

One of the clearest patterns that appears from the above analysis is the standardization and institutionalization of the relation between forms and function as we move into later periods. Bearing in mind Kent's model about segmentation (see chapter II), the archaeological record seems to add

another dimension, indicating that it is not so much segmentation but rather the 'standardization of this segmentation' that changes from society to society and becomes clearer in later periods. Indeed it is mainly the 'repetition of patterns' in the relation between structures, certain types of features and presumed functions that is striking in later societies, and this becomes evident in several examples from the above analysis, especially in the Levant and Anatolia.

The Levant displays the pattern in its full scale: from very open, diverse and loose settlement plans in the early phase of Neolithic period, especially in the south (Gilgal I, Netiv Hagdud) in which structures have not yet been the center of activities and there are no tight limits between built and unbuilt space and where activities are not yet linked with particular structures or features, to the most standardized one's, mainly in the north but also later in the south (Bouqras, Al Kowm, Beidha), in which structures have standardized internal arrangements, incorporated a courtyard, and had certain types of features at certain locations. In the case of Beidha the pattern is obvious within the settlement as well, and as already stressed it is important to note that differentiation in architecture and therefore structural segmentation existed already from the earliest phase, and it is the form of this differentiation that became more standardized at the latest phase (see chapter V). Finally standardization does not mean that transitional periods did not exist but in the context of a cross-cultural review greater emphasis should be given to differences within whole areas.

Anatolia's example is in a sense even more striking because here there are two areas (southeast Anatolia: Çatal Höyük, Haçilar, north Syria: Çayönü, Cafer) which use domestic space in a highly standardized manner, but at the same time, in completely different ways: in the first case structures are made of mud, are built adjacent to each other, and have access from the top, while in the second, they have a considerable size, are made of stone and mudbrick and are free-standing. However, in both types of settlement, there is considerable amount of segmentation, structures constitute the focus of domestic life, and there are 'special' buildings identified (buildings with non domestic function). Furthermore, despite the fact that 'forms' as well as the degree of diversity within the sites might be different, some general elements of standardization are present in both areas: repetitive types of structures, with certain types of features and presumably certain function, in some cases, changing uniformly from phase to phase (Çayönü).

In Cyprus, although some standardization in architectural forms exist there seems to be no clear link between structures, features and use, or at least not one that is expressed in a standardized way. As it has become evident from the analysis, the internal arrangements within structures and presumably their use change constantly and it seems to be very difficult to link certain structures with certain activities.

Greece on the other hand, displays much greater diversity and a rather confusing pattern. Despite the fact that traces of segmentation and standardization are indicated in the forms of the structures from the earliest periods, no relation can be identified between forms and function. Standardization in forms is evident in: Nea Nikomedeia where certain architectural types are

repeated and are built one on top of the other, Sesklo, where organization at the top of the hill and the hill slope seem to change both in form and density of occupation, Achilleio in which there is a distinctive change in architectural types from one phase to another, and Crete in which there seems to be a considerable degree of standardization in architectural forms at least in the last phase. In relation to features, only Achilleio (bench in one room, hearth in another) and Knossos (same type of hearth in the largest room) have indicated some traces of repetitive patterns, identified at their very latest stages of occupation. Although all of these examples point to a fair amount of organization in the communities, they do not seem to indicate a communal institutionalized approach into the way space should be used. With regard to Greece however, two further points should be made: a) the fact that information on the subjects is indeed very limited and fragmented, and more evidence is necessary before any further assessments can be made, and b) the fact that Greece has been also effected by influences from the north (south Europe) a consideration of which, would be vital for the better understanding of the available patterns. The necessary limited scope of the present thesis however, does not allow further investigation of this issue.

It is therefore not segmentation alone but rather the standardization of segmentation patterns that seems to indicate high levels of organization in societies and this constitutes a clear result from the above analysis. Despite the fact that activities are segmented and architecture might gain certain forms at earlier stages, the two are only linked in later periods in a more standardized and codified form. Although this result is usually acknowledged in the archaeology of Egypt and Mesopotamia in the Bronze Age, especially in discussions about urbanism and its characteristics, the particular cross-cultural analysis in the Neolithic period highlights the beginning of this process, and displays this transformation in human societies and behavior in a clearer way.

Along with standardization in forms and the use of space, there are also other, additional patterns related to human behavior. It seems for example, that the more 'private' and not uniquely related to economic (working) activities structures become, the 'cleaner' they are kept. This pattern has been evident in many sites from Levant (Gilgal I, Netiv Hagdud, Nahal Oren), Anatolia (earlier phases of Haçilar and Çayönü,), Greece (Achilleio), and Cyprus (Shillourokambos, Cape Andreas Kastros, Ayios Epiktitos Vrysi, Sotira Teppes, and up to a degree Khirokitia Vouni) during the early stages of Neolithic occupation, where artifacts are found in abundance within and around structures, in contrast to later phases in which habitational rooms are usually found empty (see for example: Mureybet, 'Ain Ghazal, Bouqras, Basta in the Levant, Çatal Höyük, Suberde in Anatolia, Knossos in Greece). The evidence from Beidha indicates a similar pattern within the site: in the early phase structures were littered with finds and with more than one entrance, later as they assumed a more private character with only one entrance they were clean of objects (phase B) and finally in phase C the bulk of the artifacts comes from the basements, while habitation areas seem to have moved at a higher level, upstairs.

Trevor Watkins (1990) in his excavations of an aceramic Neolithic site in northern Iraq (Qermez Dere), has identified a similar pattern, in three well maintained, free of objects subterranean structures, with no domestic equipment inside other than a hearth, and one or more non-structural clay pillars (Watkins 1990: 342). He argues for a re-definition of the role of the house, according to which what constituted earlier merely the shelter for general everyday activities, was perceived now as 'something more than utilitarian, as the home, the private and concrete expression of a particular family group' (Watkins 1990: 344).

The review of the material in the present thesis, seems to reinforce the above suggestion, and provides a wider frame for the identification of patterns. It seems for example, that before the stage, in which structures are completely empty of domestic equipment (Bouqras, Basta, 'Ain Ghazal), there is a stage in which they contain a considerable number of fixed features but are kept clean from refuse and artifacts (Achilleio, Knossos in Greece, Haçilar, Çatal Höyük in Anatolia, Beisamoun, El Kowm in Levant). In simplistic terms therefore, it seems as if there is initially a standardization in architectural forms, then in depositional processes with emphasis on the 'cleanness' of interiors but the maintenance of fixed features inside the structures and finally the removal of fixed features as well, with the use probably of portable ones. The most persistent pattern of uniformity comes form Çayönü, in which however, after a long tradition of standardization both in forms and depositional behavior, there is considerable variability at the latest phase (see chapter V). Could it be that when standardization has been finally accomplished in a society, in terms of forms and behavior, then there is no need any more to be explicitly demonstrated (in architecture and the use of space) and is expressed in other ways, as for example sociopolitical organization, symbolic activities, and even the very 'consciousness' of 'a culture'?

Within this general pattern, other related patterns have come up as well:

a) the shifting emphasis on the use of built/inside and unbuilt/outside space (see for example Achilleio in Greece, Çayönü, in Anatolia, Yiftahel in Levant, and Cape Andreas Kastros and Khirokitia Vouni in Cyprus),

b) several distinctive abandonment processes, as for example the 'intentional' deposition of artifacts by the entrance near by working areas (Mureybet, 'Ain Ghazal, Beisamoun: in all these areas, finds where only recovered in areas related to working activities, while the rest of the structure was kept clean). Other patterns were identified in Çatal Höyük where tools were found inside bins in the annexes, and in Haçilar where only the distraction layer provided finds while the layer that was abandoned was completely empty. Finally, in Gilgal I finds seem to have been 'gathered in heaps' according to the excavator (Noy 1989:12), a pattern which finds a remarkable parallel in the ethnographic work of Brooks (Brooks 1993, see chapter II), regarding the patterns which derive from the 'planned abandonment of villages',

c) the incorporation of outside space in the form of private courtyards: Mureybet, Bouqras, and

d) the shifting of cooking activities inside the structures: Haçilar, Dimini (Halstead 1989, see chapter V).

In viewing the potential of all these patterns one should not forget the fragmentary nature of the archaeological record and the 'fragility' of this particular type of information as well as the problems related to post-depositional processes. The presence of certain patterns, however, even at a very 'general' level, points to the potential of the subject for further research and as already mentioned, it is this potential that the present thesis seeks to investigate most of all.

Finally it is important to note that all these patterns should be viewed from a general perspective and with the realization that for the understanding of each of these cases one should go back and examine the specific cultural material from each site. As noted before, cross-cultural analysis here is used as a methodological and not an explanatory tool. It views human behavior from a wider perspective, highlighting patterns which otherwise might have not been obvious, but one should keep in mind that for the understanding of individual cases, detailed culture specific analysis is necessary.

6.2 Anthropological models and archaeology

In order to understand the benefits from the interaction between archaeology and anthropology, one should initially recognize the fact that they both view societies from a different angle and work with different material. A review of the above could help clarify the specific questions that each discipline can serve better, and point to the different methodological approaches which are dictated by the very nature of their material.

From an anthropological point of view, the direct contact with living societies, led from the very beginning to a definition of culture as a mental phenomenon, 'which includes knowledge, belief, art, morals, law, customs, and any other capabilities and habits' (Tylor 1871:1), or in other words it is 'an organized body of conventional understandings manifest in art and artifacts which, persisting through tradition, characterizes a human group' (Redfield 1940 in Watson 1995:683). In archaeological terms however, in which the researcher comes in contact with past societies through their material remains, the definition of culture, from the very beginning, evolved around artifacts and their role in our understanding of past societies and cultures. Patty Jo Watson (1995:684-687), in her latest review of this issues, describes in a comprehensive manner, the way in which the concept of culture developed and changed in the history of archaeology: from the 'group of sites containing distinctive artifact assemblages' in the turn of the century, to W. Taylor's definition of culture as a mental phenomenon, and artifacts as objectifications of culture rather than culture itself, to the processualist view of culture as 'a man's extrasomatic means of adaptation', and finally to the postprocessualist understanding of culture which views artifacts as 'symbols/culture in social action'.

We have already seen in the discussion about cross-cultural studies (chapter III), that the concept of culture was often used in order to identify and isolate single cases of groups with common

characteristics, in order to facilitate comparative methods of analysis. In the history of anthropological thought however, this concept of static, isolated cultural groups has been attacked severely (Wolf 1984), and in the most recent years, more and more researchers argue about 'formations of discrete cultural sets' which are 'continuously in construction, deconstruction, and reconstruction, under the impact of multiple processes operative over wide fields of social and cultural connections' (Wolf 1984:396). According to these views, the concept of culture is a starting point of inquiry, it has a methodological value, and it is the search for connections which might or might not exist (Wolf 1984:394).

In this debate, archaeology seems to have a more advantageous position, because due to its material 'basis' it has always to start looking for connections among its finds, these being: artifacts, structures, settlements, or floors in our case. In this sense its range of connections is more limited, at least at the initial stages of its inquiry, and as a result its comparisons between different sets of connections are more clearly defined.

Another distinction between anthropological and archaeological studies is the fact that they view societies from different time perspectives (Smith 1992, see also chapter I). Anthropological research approaches societies from a synchronic point of view, in which material culture is usually examined in its cultural and social context, and as a result, social 'code' and 'meaning' is widely available and viewed as an institution within which individuals might act in different ways.

Archaeological record on the other hand, views societies and cultures from a diachronic perspective providing insights mainly on the way in which societies *change* their 'ideas' about social, political, and economic 'codes', and 'meanings'. As it became evident in the present thesis, synchronicity in archaeology is very difficult to find even at the level of individual floors (due to the effect of several formation processes) and one should be therefore very careful about models that require from archaeology to produce 'comparative maps' in terms of spatial associations and artifact distributions.

Let us take for example Susan Kent's cross-cultural model (see chapter II) about sociopolitical complexity and segmentation according to which 'the use of space (behavior) and the built environment (cultural material) become more segmented or partitioned as a group's culture becomes more segmented or complex' (Kent 1990:129). Kent based her analysis on the concept of segmentation denoting 'a separation of genders into male and female, of age into categories, and of activities into functionally discrete entities' (Kent 1990:128). And indeed in a living society, ideas about the way domestic space should be used, are somehow crystallized, and as a result divisions in space both in architectural and conceptual terms are clearly manifested, and the interpretation of their meaning is usually readily available (through qualitative methods: interviews etc.).

Archaeology however, works from the opposite direction and from material culture tries to 'reconstruct' and understand the nature and structure of past societies. In that respect, it is very difficult for archaeologists to translate structural segmentation into social or even functional

activities, and before they even attempt to deal with these kind of questions, they have first to decide on which set of connections/patterns they should focus.

As it has become evident from the above analysis, the 'model' that the archaeological record can juxtapose to Kent's model, taking into consideration structural segmentation, is primarily a model based on the standardization in forms and behavior. In other words it is the degree up to which a society 'decides' and links particular forms to particular activities. In a sense one could say that this is a way of viewing Kent's model from an archaeological perspective, in diachronic terms.

Taking into account these observations, and after the examination of the material in the present thesis, it seems that archaeology needs to rethink several of the suggested anthropological models and try to modify them according to the particular nature of its own record.

Instead of focusing for example on segmentation in the archaeological record, it should initially try to delineate more general aspects in the use of space in societies, such as the way built and unbuilt space was used, the presence or absence of permanent features, refuse deposits etc. Furthermore, it should examine the way in which these ideas about the use of domestic space, were finally institutionalized within societies and how this could be translated in terms of the social structure and organization of these societies. Instead of focusing on the identification of function, gender and age therefore it should start by focusing on repetitive patterns, standardization, change, and rate of change, viewing in this way segmentation from an archaeological point of view.

Despite the difficulties however, the benefit from the interaction among the two disciplines is quite obvious. Anthropology has the opportunity to view its material from a different perspective, while archaeology is required to approach its record from a more synthetic point of view, and acknowledge its links with disciplines which provide a time depth as well (history for example).

6.3 Archaeological reality and the identification of domestic space

In this section I would like to refer to some methodological issues that came up during the course of the microscale analysis attempted in the thesis, and discuss the process of identification of the use of domestic space in archaeology so far, and the possibilities for alternative methodological approaches to the record.

The fragmentary nature of the archaeological record has always been one of the most serious problems for archaeological research and the review of the material in Neolithic Eastern Mediterranean indicated several cases, in which the record constituted a significant problem for analysis: Multi-period sites which make access to earlier periods difficult, single period sites which cause difficulty in chronological associations, flimsy architecture which is not always detectable, etc. Even when material is well preserved and in abundance, as in the case of Ayios Epiktitos Vrysi in Cyprus (Vrysi), the level of inferences that one has to go through in any attempt to interpret the finds, makes very difficult conclusive statements about the way particular structures were used.

In addition to these problems, one has to keep in mind, that the way in which archaeologists approach the record has also had an influence on its potential to provide 'reliable' information. Neolithic research in the discipline for example, as it became obvious, has been used, either within the realm of 'great themes' related to the study of agriculture, domestication, settled life etc., or in other cases as an indicator of cultural continuity (see chapter IV, V). All these approaches had an effect on the way archaeology was practiced in each area, and resulted in the excavation of small soundings and the study of particular types of objects, focusing mainly on pottery or ecofacts.

Finally there is the problem related to the way in which archaeological material is published and recorded. As it became evident, the majority of the most recent publications in the area of Neolithic Eastern Mediterranean are published in the form of preliminary reports which by their very nature can only provide limited information (see also Bar Yosef 1981). This situation, apart from problems related to the access of the material, also causes difficulties in the understanding of stratigraphic sequences, contextual information, methodological and recording processes within each particular project. These are all issues of great importance to the formation of archaeological knowledge and constitute valuable insights in any attempt to evaluate the available archaeological information. Especially with regard to spatial issues what is also obvious in publications, is the inconsistency of the information available: some publications focus on vertical sequences and patterns (layer by layer/ see for example Knossos) without attention to patterns inside and outside structures, and others do exactly the opposite (Achilleio).

Most of these problems however, also indicate the objectives that archaeology sets as a discipline itself. One of the main aims of archaeology is to study change: in material culture, in social, economic, political terms. However, when we transfer the question of change, from the theoretical domain of explanatory models to the archaeological record, in other words, when we examine the way we define change in the process of an excavation, then the issue becomes more complicated. It seems rather obvious that the very first point of reference for the definition of change in an excavation is stratigraphy. The matter of how we define change in archaeological practice therefore is essentially a matter of how we perceive and define stratigraphy and what is the purpose that we use it for.

One example from the Neolithic site of Achilleio in Greece illustrates in the best way the heart of the problem. In describing the recording system in the publication, M. Gimbutas explains:

> "Stratified building levels permitted further subdivision of the chronological phases, but these subphases were *disregarded* in the study of the lithics and ceramics because *little change* could be discerned. Nevertheless, presentation of the architecture by building subphases facilitated a more precise picture of the settlement development at Achilleio." (Gimbutas *et al.* 1989:32) (emphasis added)

It is quite common, in archaeology, for chronological phases to be based on ceramic styles. However, this emphasis on ceramic styles in the case of Achilleio had a rather peculiar result. It resulted in

mingling together in the same phase (middle Neolithic) two different kinds of architectural traditions: 'post houses' and 'two-room stone houses' (Gimbutas *et al.* 1989: 33), while the distribution of lithics and pottery was recorded only according to the general chronological phases, and as a result detailed information about the distribution of these finds was missing.

The significance of pottery in monitoring change, constructing relative chronologies and creating 'temporal horizons' which are necessary for any kind of analysis in archaeology, is beyond any doubt. The above example, however, indicates that the traditional emphasis on chronological change and pottery styles often results in ill-treatment of other equally useful information as for example changes of features in architecture, depositional behavior etc. As it became clear in Çayönü for example, changes in any of these three variables do not always happen simultaneously, and this is an observation that could have a very significant effect on the reconstruction and understanding of everyday life in past societies. This kind of example therefore indicates the need for alternative approaches to the material, especially with regard to synthetic issues, such as the use of domestic space, and the understanding of change from multiple perspectives.

The present analysis (chapters IV and V), has stressed the importance of combining information about artifacts, architecture and depositional variability and has indicated the potential of such a study, pointing at several patterns:

a) the constant change in the way structures were used from floor to floor,

b) differences between constantly changing and unchanging structures and what they might indicate,

c) the importance of permanent features as indicators of change in the way structures were used,

d) the role of artifacts in a floor deposit, their usefulness for the identification of abandonment processes, and their 'fragility' as indicators of function (because they could reflect: either refuse, function or storage),

e) the importance to 'contextualize' other types of information as well, such as bones, in the attempt to examine disposal and refuse processes, and

f) the role of secondary features, such as posts and pits and what these could indicate (e.g. intensification of activities, less permanent structures etc.).

All these issues require the monitoring of change at a stratigraphic level but from a more synthetic point of view, than is usually attempted in archaeology. And although the difficulties related to the nature of the record should be always taken into consideration, what becomes evident from all these potential lines of investigation mentioned above, is also the importance of sampling in archaeology and of excavating complete units/structures (Kent 1987b). Indeed one has to say that it is simply impossible to examine issues of social structure and organization with regard to spatial arrangements without a significant sample. Lacking direct access to societies, this is probably the only other way, in which archaeologists can approach these issues, through the study of repetitive patterns, standardization, association of features, structures and finds etc.

The example of Çayönü is quite appropriate at this point. As Özdogan stated clearly if the site was excavated in the form of small soundings only a fragment of our present knowledge would have been revealed and the results could be very misleading (Özdogan and Özdogan 1989:71). The case of the 'special structures' which initially were attributed to a single phase but finally they were proved to be contemporary with domestic buildings distributed in several phases, is a clear indication of this danger. Furthermore, there are other examples of extensive excavations which have provided rewarding patterns: Netiv Hagdud with a great variety of structures in size and features, Çatal Höyük with the division of the settlement in quarters separated by courts, Nea Nikomedeia with the successive rebuilding of a structure at the same location etc.

The importance of synthetic questions is widely recognized in archaeology, because they require a considerable amount of information and help in this way to a better reconstruction and understanding of the past. So far however, it seems that we attempt to approach holistic questions in archaeology, based on a methodology which focuses primarily on artifacts. This is rather a paradox. It is high time to recognize that for more holistic questions, we need to modify and change the way we view archaeological record so far, and look for alternative ways to approach it. This does not mean that one should discard previous attempts or erase and refuse everything that has been done in archaeology so far. If one thing is obvious from the above research is the necessity for specialized studies (tools, pottery, etc.), the so called processual or traditional studies, because these constitute the basis for a synthetic approach.

The present analysis, argues for the necessity to work in parallel with what has been done so far, but viewing the archaeological record from a more holistic point of view, analyzing units instead of artifacts and focusing on the association of finds and features, instead of particular, isolated types of information (Connolly 1996).

An approach that would focus on floors as units, containing associated finds and features, could provide the necessary information required for synthetic studies, while at the same time, respond to the recent demands in archaeological literature for a more coherent discipline, with its own 'intra archaeological database' (Yoffee and Sherratt 1993:8). This database, based on the contextual information associated with floors, could be created in parallel to preliminary and final publications, facilitate access to material, and constitute a useful databank for a great number of archaeological inquires.

As it was shown earlier (chapter I), attempts for these kind of databases, have already been made in archaeology (Gardin 1980), but concentrating more on a standardized terminology, they have not been met with great enthusiasm (Cleuziou *et al.* 1991). Additionally, we have recently seen the creation of a couple of Atlas (Gebel 1984, Hours *et al.* 1994) in Near Eastern literature, which have attempted to facilitate access to the material and to accumulate all available information for further reference. In parallel to these synthetic attempts, more and more projects in archaeology adopt sophisticated computer programs, in order to record, analyze and present their data, while at

the same time, there is a considerable disagreement on how exclusive these applications can be to outside audiences (Hodder 1996).

In relation to all these attempts however, and taking into consideration the above discussions about the nature of the record itself (see also chapter III), one should pause for a minute and think what is the kind of information that we most need to have access to as researchers and why. The present thesis indicates that it is contextual information (stratigraphic sequences in particular) rather than objects which we most need to have access to as archaeologists, because it constitutes the first level of inferences made by the excavator, and provides the frame for all later interpretations. The availability of contextual information cannot be a panacea for all archaeological problems and questions. But it can be a good start, or an alternative way to approach the record and change some long standing problems and preconceptions in archaeological practices and archaeology in general.

It seems common practice for archaeologists, whenever a methodological problem is identified, to put emphasis on future research (see for example Flannery 1972, 1993). The main argument for such an approach, is usually that older projects and publications lack the sophistication in excavation techniques and recordings, which current questions need. Though this might be true to a certain extend, one has to recognize that contextual information (stratigraphic associations) constitutes already the basis of every excavation and therefore archaeologists could contribute to spatial studies without any additional effort. Furthermore, an argument that almost dismisses the work that has been done so far, could easily lead to relativistic statements that there is no need for final publications at all, as long as they are 'of little use' (especially for spatial issues), for future research. As it became evident, the view taken by the present thesis, is that it would be more constructive if, instead of dismissing older works, one could find a way to evaluate the information they provide, pinpoint the inadequacies and put forward suggestions for improvements to the problem.

6.4 Archaeological reality and future research

The present thesis has examined the available archaeological material in Neolithic Eastern Mediterranean in an attempt to investigate how far we can stretch our understanding of the way domestic space was used and against which record we can test suggested anthropological models. In the course of the analysis it became obvious that in order to contribute to a dialogue with other disciplines archaeology should examine its own record in depth and attempt to approach its material from a more holistic point of view.

So far we have identified in archaeological practices a tendency to compartmentalize the archaeological record into specific sets of data and stressed the importance to examine the material in units (e.g. floors) rather than in isolation.

As a conclusion therefore, and in the light of the above research on spatial issues and the use of space, apart from the cultural patterns that were discussed above, one should stress the importance of three final points: stratigraphic context, publications and Neolithic research:

Contextual information is the only element in the archaeological process that cannot be examined at a later stage. Objects can be studied stylistically, functionally or otherwise in a store-room or a museum, but stratigraphic sequences are destroyed with the process of excavation and therefore lost. In that sense archaeologists have to accept their role in the 'construction' of the past, and face the responsibility that comes with it.

Using the same metaphor which post-processualists used in order to highlight matters of meaning and symbols, the archaeological record could be considered as a 'text', in which stratigraphic sequences and context play the role of 'syntax', i.e. the way in which things are ordered in a physical sense. Archaeologists should view their role in the creation of this text as editors. Past societies have been the authors in this process of creating the record/text, but archeologists, in their attempt to 'make sense' out of what they excavate, act upon the record as editors. They have therefore a good share in its creation. The implication from this metaphor is quite obvious: Without 'syntax'/context there can be no language and therefore no text; and without editors/publication there can be no book and therefore no reading.

In the course of the analysis we have identified both these problems: the lack of final publications and the fragmentation and objectification of context. We have also attempted to examine the reasons for these problems and identified a number of factors which have influenced archaeological practice: the way in which the past is perceived in each individual area, the questions that the archaeological record is called upon to answer, the 'status' of Neolithic research in the discipline, the fragmentary nature of the record etc.

As it became evident from chapter I many of these issues have led current theoretical research in archaeology into a disbelief in archaeological practices, pessimism, innocence or sometimes relativism (O'Shea 1995). However, having been 'exposed' to all these issues, it is rather impossible now to go back into the 'innocence' which characterized 'traditional' or even 'processual' archaeology. It seems rather necessary now to start tackling the problems and taking responsible positions, equipped with the awareness that positivism has provided us so far. Walter Taylor has pointed precisely towards this direction decades ago:

> "...an archaeological cultural context, by the very nature of the basic materials, is constructed by inference to a greater extent, perhaps, than contexts based on written or living sources. *But there is no other means to construct them*, and without contexts there is no way either to write history or study culture."(Taylor 1948:114-115)

Finally, directly related to these issues about the nature of the archaeological record and the ways to approach it, is also the role of Neolithic research in archaeology. In the course of the present thesis it

became evident, how difficult it is for Neolithic studies to attract attention independently, and without having to follow certain political or academic agendas. This involvement of archaeology in 'politics', might be in a sense inevitable if one bears in mind that culture is 'persisting through tradition' (see above), and also that both archaeologists and certain political systems are themselves parts of cultures. As history has shown, it is quite common for modern societies to *'use'* their past or (in the case of imperialist and colonialist archaeologies; Trigger 1984) the past of other societies as well, in order to define and justify their cultural identity.

Although, however, getting involved into the politics of the past and the present might seem to be common practice for archaeologists today, in order to accomplish their research programs, get permits, funding etc., it is up to them to point to alternative roles for archaeology and the past. Neolithic research provides a unique opportunity for archaeology to present to the public a different way of looking at the past, not only through great civilizations and impressive objects, but also through domestic life and everyday activities, used and abandoned houses, changes in human behavior. The Neolithic record provides the chance to view archaeology from a different perspective, which might seem less colorful but is equally impressive.

The present research, with its focus on domestic space, has attempted to contribute towards this direction and view the role of archaeology and of the past from a different perspective, while at the same time contributing to current methodological problems and questions.

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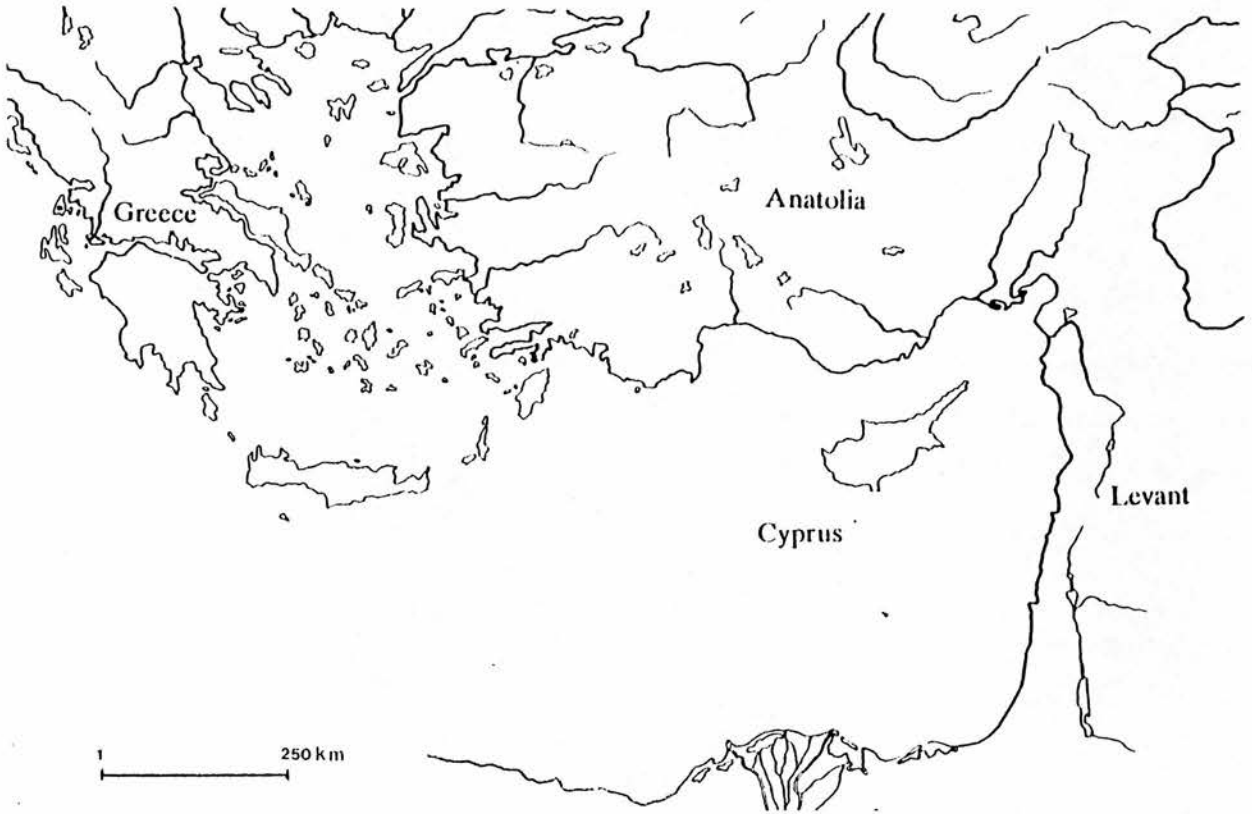
Text Illustrations

Illustration 1: Map of Eastern Mediterranean.



(after Melas 1985)

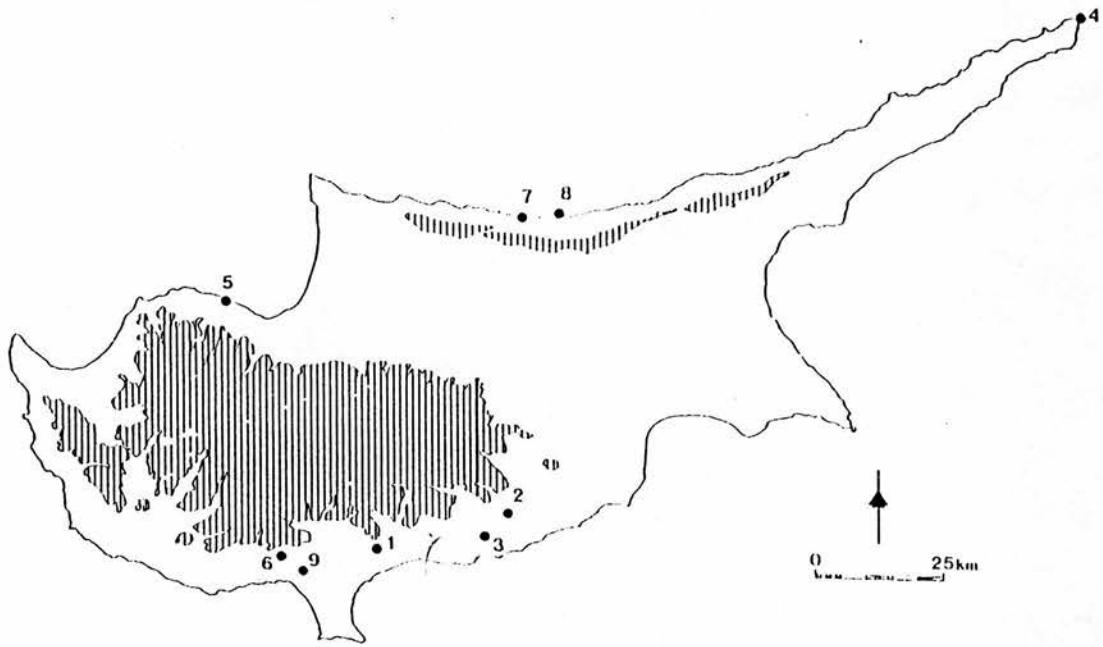
Illustration 2: Chronological chart.

	Cyprus	Greece	Anatolia	Levant
period 2 10.200-8.800 BC				Hatoula, Gilgal I Netiv Hagdud Jericho Nahal Oren Mureybet
period 3 8.800-7.600 BC			Haçilar, Çayönü Cafer Höyük	Jericho Munhata, Mureybet Yiftahel 'Ain Ghazal Beidha Tell Abu Hureyra
period 4 7.600-6.900 BC	Shillourokambos - Parekklisha		Çatal Höyük (XII-IX) Can Hasan III Suberde Gritille Navalla Çori	'Ain Ghazal Tell Abu Hureyra El Kowm 2 Beisamoun Abou Gosh Bouqras, Basta Tell Ramad
period 5 6.900-6.400 BC		Argissa, Knossos	Çatal Höyük (VIII-II) Mersin	'Ain Ghazal (Tell Abu Hureyra) (Ras Shamra) Byblos
period 6 6.400-5.800 BC	Cape Andreas - Kastros Khirokitia - Vouni Tenta - Kalavassos Limnitis - Petra tou Limniti	N.Nikomedeia Achilleio I-IIIa Sesklo Knossos IX-IV	Çatal Höyük (I) Haçilar (IX - VI)	'Ain Ghazal Byblos
period 7 5.800-5.400 BC		Servia Achilleio IIIb-IV Sesklo, Tsangli Otzaki Knossos III-II Katsamba		
period 8 5.400-5.000 BC		Dimini, Saliagos Sesklo Knossos, Magasa		
period 9 5000-4.500 BC				
beginning of 4th mil. BC	Ayios Epiktitos-Vrysi Sotira -Teppes Kantou, Troulli			

Sources: for Levant and Anatolia: Hours *et al.* 1994; for Greece: Papathanassopoulos (ed.) 1996; for Cyprus: Knapp and Manning 1994, Guilaine *et al.* 1995.

Note: All dates in the above chart are calibrated. However, due to the fact that for the purpose of the present research (see chapter III), the information about chronology derives from synthetic works in each geographical area which present established chronological schemes, it has not been possibly to have access to the specific calibration methods used for each site. As a result, specific information on the particular subject should be sought through the references of the above sources.

Illustration 3: Map of Cyprus showing the Neolithic sites under examination.



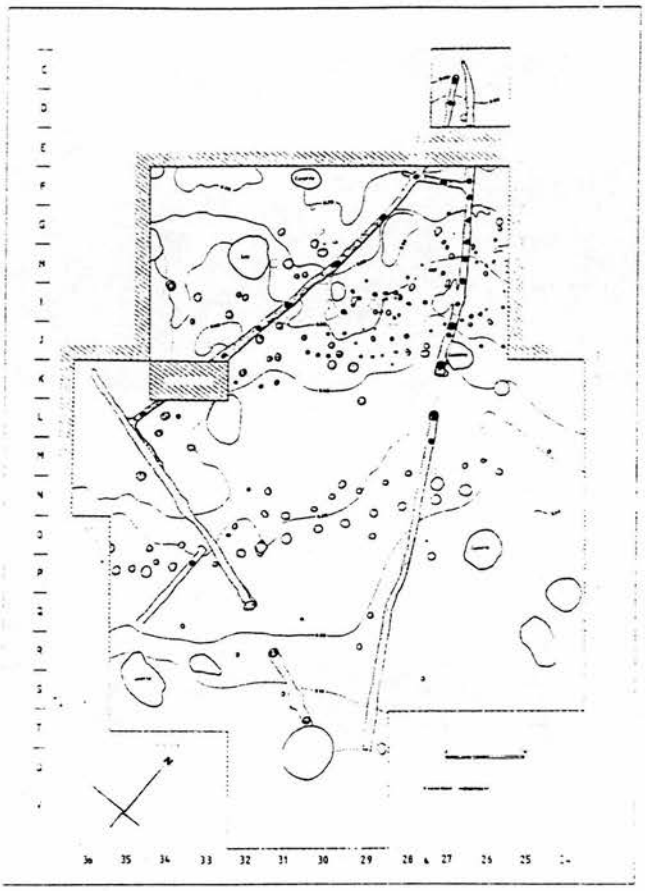
Key of sites:

Aceramic Neolithic:
1. Shillourokambos - Parekklisha
2. Khirokitia - Vouni
3. Kalavassos - Tenta
4. Cape Andreas - Kastros
5. Limnitis - Petra tou Limniti

Ceramic Neolithic:
6. Sotira - Teppes
7. Ayios Epiktitos - Vrysi
8. Klepini - Troulli
9. Kantou - Koufovounos

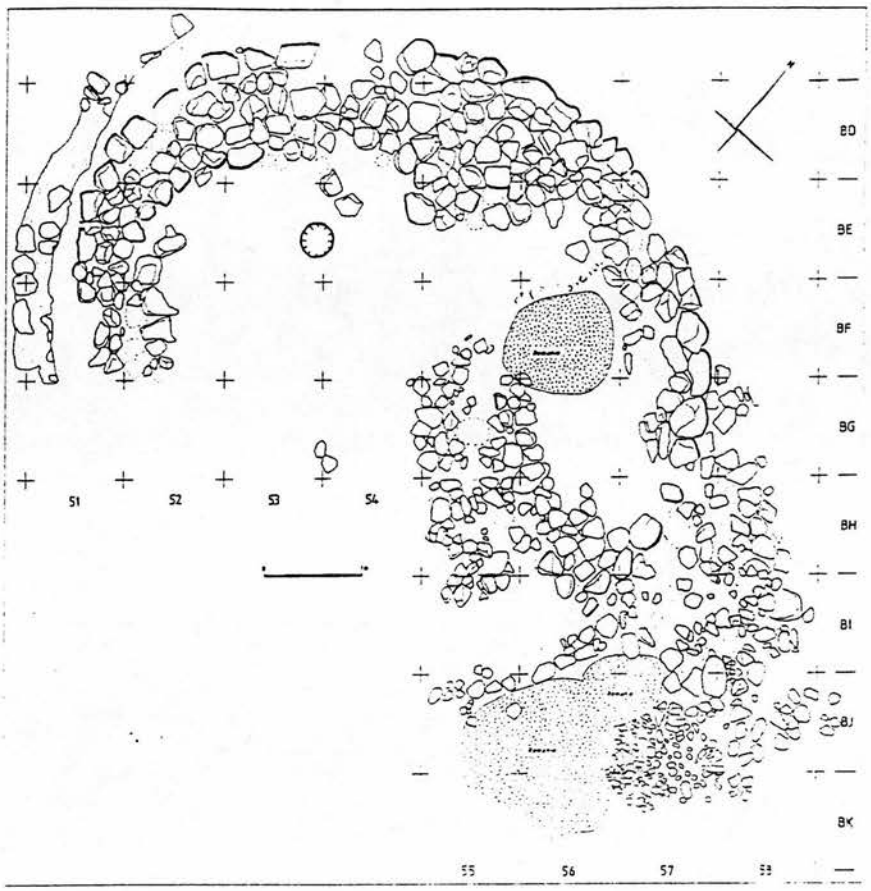
(after Todd 1987)

Illustration 4: Shillourokambos-Parekklisha, Aceramic period, early phase.



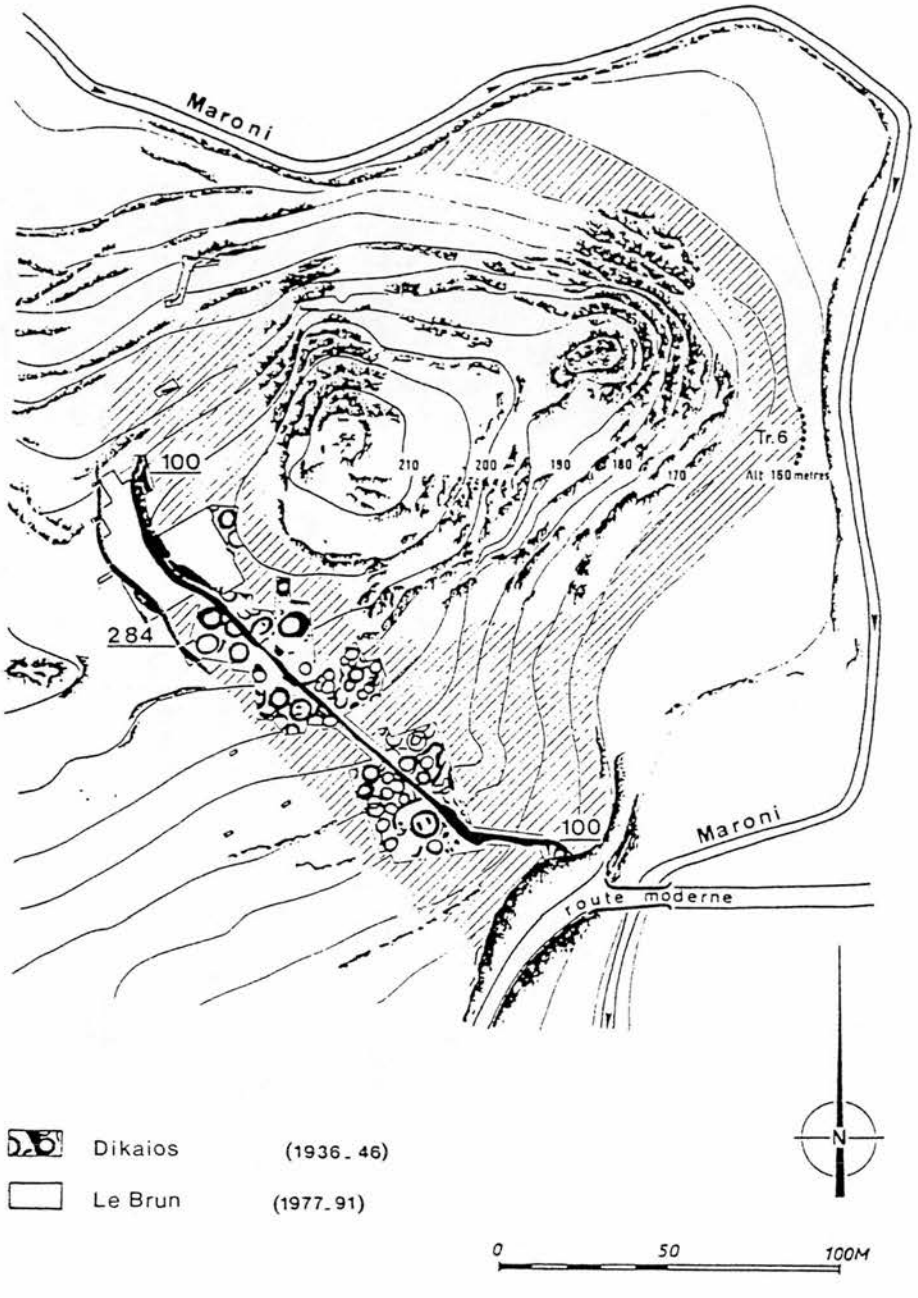
(taken from Guilaine et al. 1995: fig. 7)

Illustration 5: Shillourokambos-Parekklisha, Aceramic period, late phase.



(taken from Guilaine et al. 1995: fig. 6)

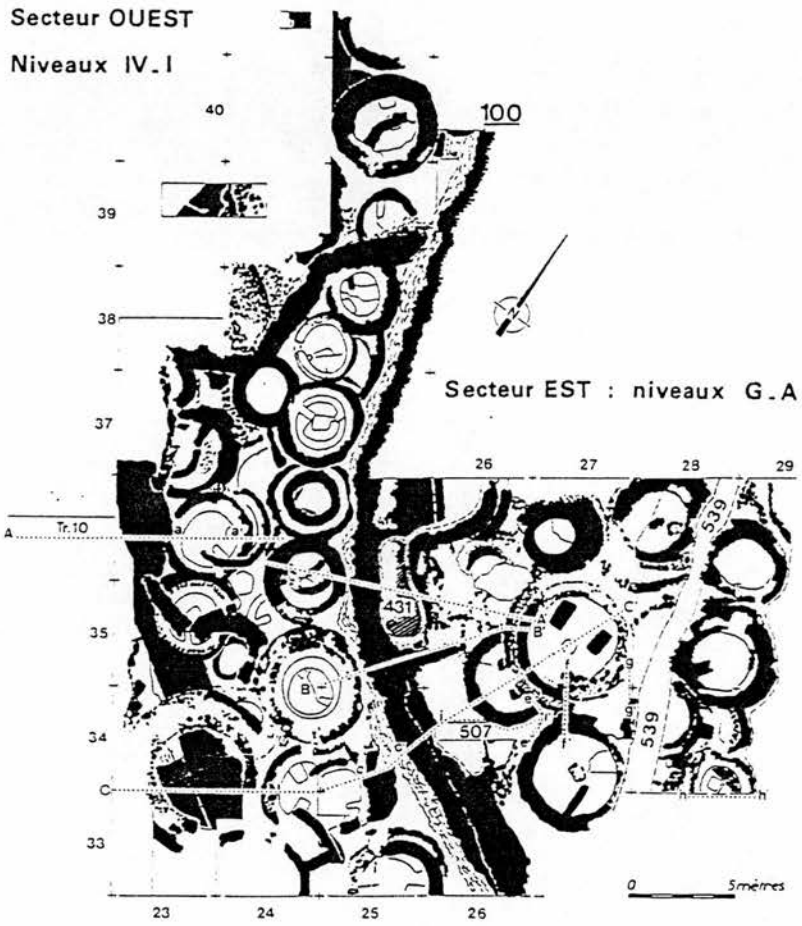
Illustration 6: Khirokitia-Vouni, Aceramic period.



(taken from Le Brun 1989: fig. 2)

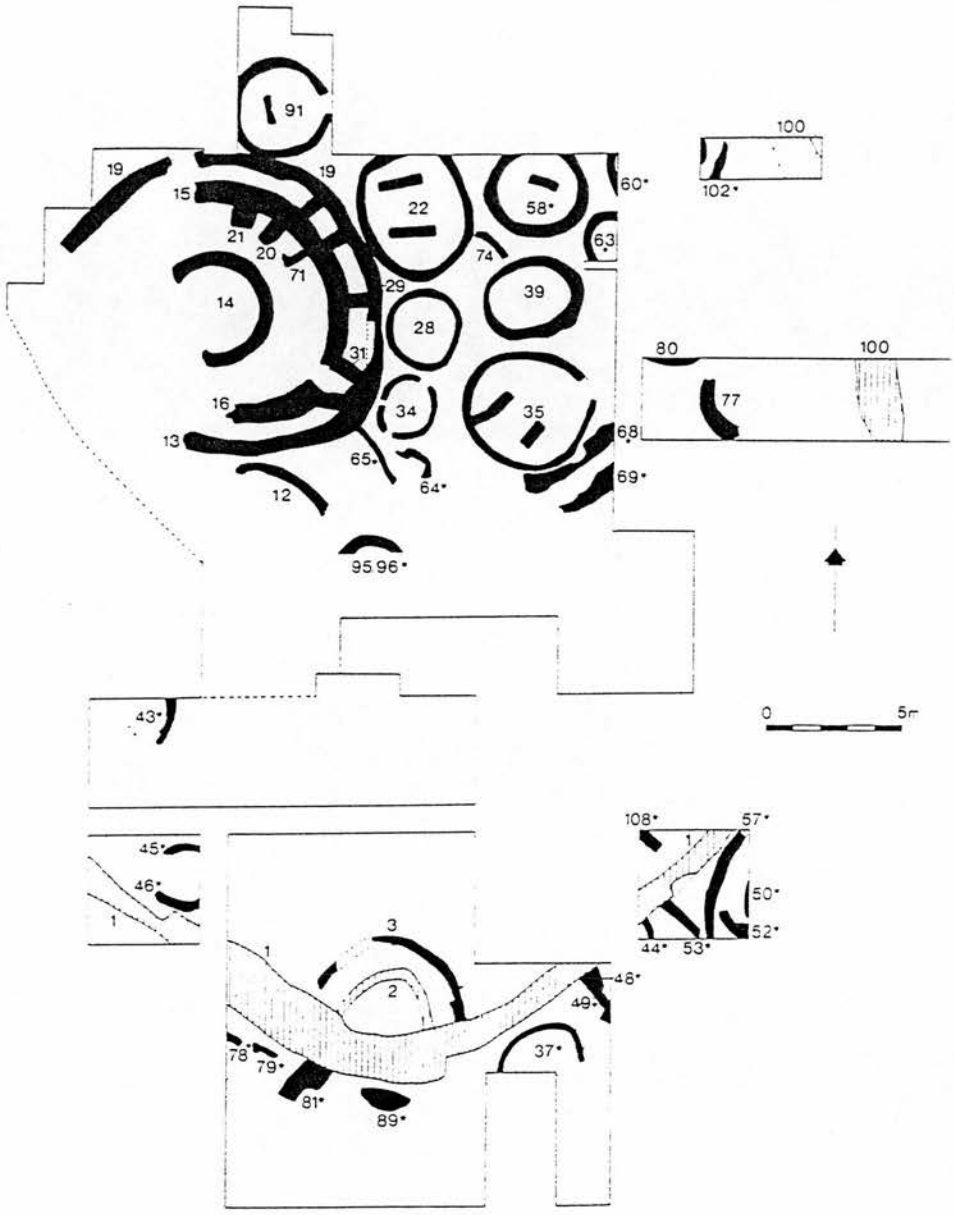
Illustration 7: Khirokitia-Vouni, Aceramic period, recent excavations.

KHIROKITIA 1977.1986



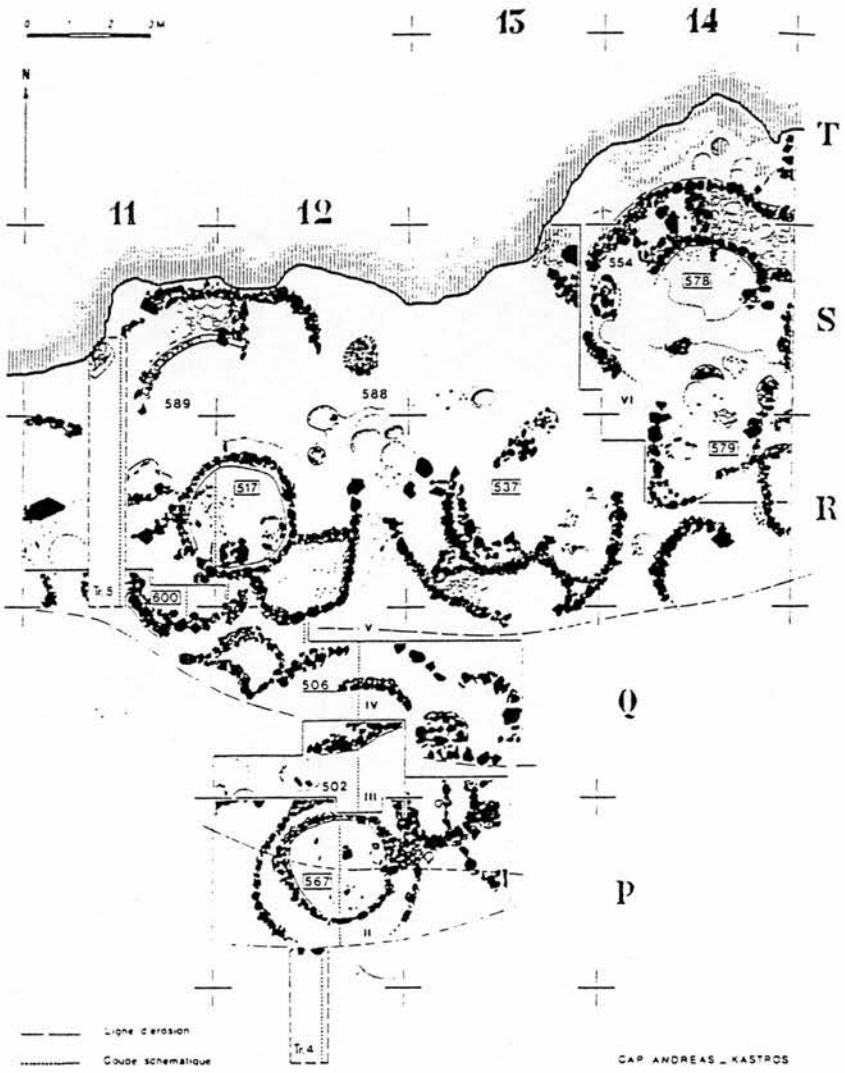
(taken from Le Brun 1989: fig. 3)

Illustration 8: Kalavassos-Tenta, Aceramic period.



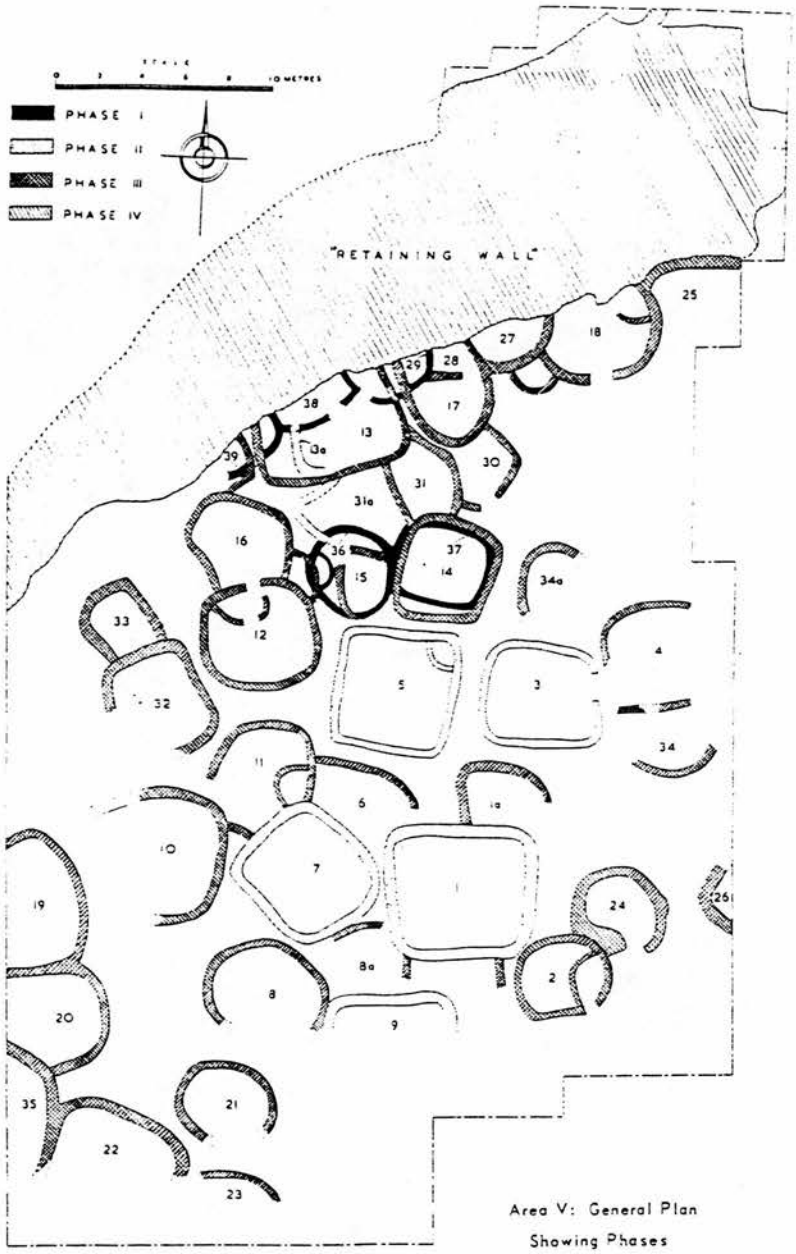
(taken from Todd 1987: fig. 20)

Illustration 9: Cape Andreas-Kastros, Aceramic period.



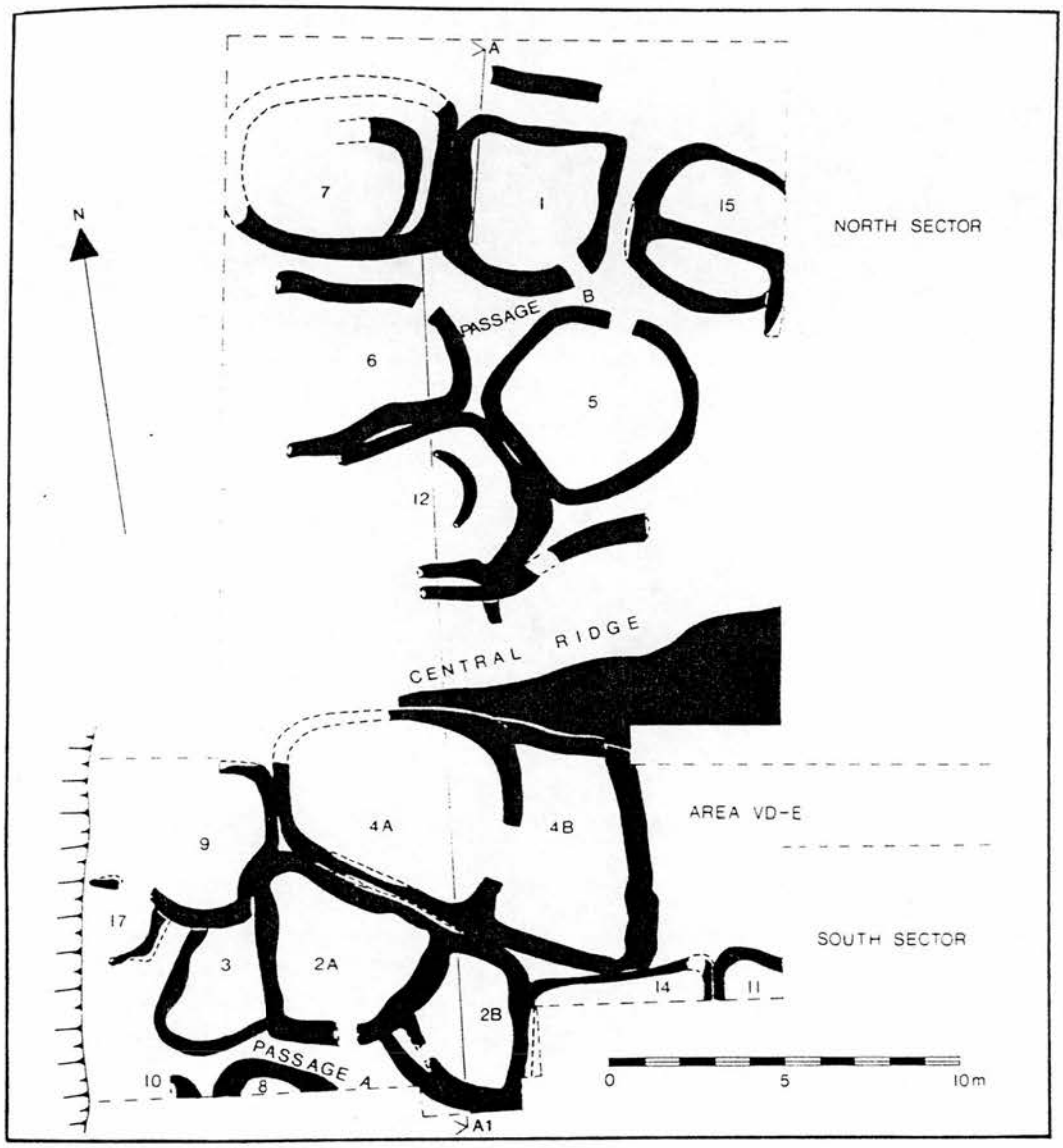
(taken from Le Brun 1981: fig. 2)

Illustration 10: Sotira-Teppes, Ceramic Neolithic.



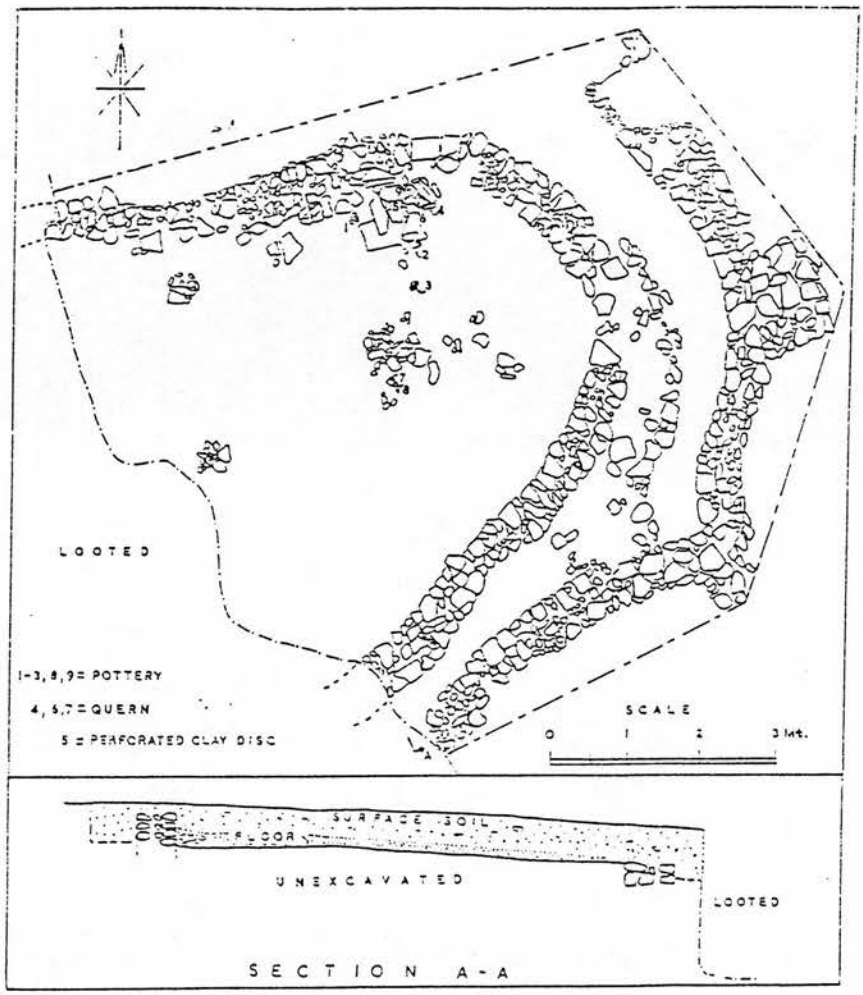
(taken from Dikaios 1961: plate 10)

Illustration 11: Ayios Epiktitos-Vrysi. Ceramic Neolithic.



(taken from Peltenburg 1983: fig. 2)

Illustration 12: Klepini-Troulli, Ceramic Neolithic.



(taken from Dikaios 1962: fig. 33)

Illustration 13: Kantou - Koufovounos, Ceramic Neolithic, sector A.

(taken from Manzourani 1994: fig. 6)

Illustration 14: Neolithic sites in Cyprus.

sites	period	publication	excavation	references
Shillourokambos	Aceramic	preliminary report	soundings	Guilaine *et al.* 1995
Khirokitia	Aceramic	final publication	extensive	Dikaios 1953, Le Brun 1984,1989,1994
Kalavassos	Aceramic	final publication	extensive	Todd 1987
Cape Andreas	Aceramic	final publication	extensive	Le Brun 1981
Limnitis	Aceramic	final report	soundings	Gjerstad *et al.* 1934
Sotira	Ceramic	final publication	extensive	Dikaios 1961
Ayios Epiktitos	Ceramic	final publication	extensive	Peltenburg 1983
Klepini	Ceramic	final report	soundings	Dikaios 1962
Kantou	Ceramic	preliminary report	soundings	Manzourani 1994

Illustration 15: Description of the archaeological evidence.

	size	nature of habitation
ACERAMIC		
Shillourokambos	4 ha	rather poorly preserved, 2 phases:early: str. with triangular shape made of wooden poles and *pisé*, late:circular str. made of stone
Khirokitia	1.5 ha	well preserved, round str., stone, of variable size, long occupation
Kalavassos	2.6 ha	well preserved, str. made of *pisé*, round shape, variable size
Cape Andreas	0.1 ha	rather poorly preserved, mainly round, stone foundations
Limnitis	?	poorly preserved, disturbed, post huts of an irregular shape, 4 phases.
CERAMIC		
Sotira	1 ha	rather well preserved, stone foundations, straight walls round corners
Ayios Epiktitos	? (>3 ha)	well preserved, irregular shape, stone, subterranean in their majority
Klepini	?	poorly preserved, disturbed, hut of irregular shape, with stone foundations
Kantou	c, 3.6 ha	well preserved, str. of stone, irregular shape or square with round corners

Illustration 16: Description of the layout of the settlements.

	boundaries	layout	non domestic buildings	communal space
ACERAMIC				
Shillourokambos	–	f?	–	–
Khirokitia	*	f	–	large plastered area
Kalavassos	*	f	?	–
Cape Andreas	–	f,a	–	large plastered area
Limnitis	–	f?	–	–
CERAMIC				
Sotira	?	f,a	–	–
Ayios Epiktitos	?	f,a	?	passages/lanes
Klepini	–	?	–	–
Kantou	–	f,a	–	open areas

note: layout: f: free standing structures, a: adjacent

Illustration 17: Structural information

	complete units	shape	material	segmentation	type of partition	access	range of size
ACERAMIC							
Shillourokambos	*?	round, triangular	stone, wood poles, *pisé*	s?	A?,Bc	a	
Khirokitia	*	round	stone	s,a	A,Ba,Bc,Ca	a	1.50-30.40sq.m. (112 floors)
Kalavassos	*	round	*pisé*, stone	s	A,Ba,Bc,Ca	a	
Cape Andreas	*?	round	stone	a	A,Bd	a	c. 13 sq.m. (complex 537)
Limnitis	_	irregular	stone?/posts?	a?	A?,Ba	?	12-13.5 sq.m. (2 rooms)
CERAMIC							
Sotira	*	irreg., squar.	stone	a	A,Bc	a,b	4.90-29.30 sq.m. (67 floors)
Ayios Epiktitos	*	irregular	stone	a,s	A,Ba,Bc	a	7.20-27.00 sq.m. (30 floors)
Klepini	_	oval?	wattle and daub	?	A?	?	
Kantou	*?	irreg., squar.	stone	a,s	A,Bc	a	

note: segmentation: s: subtractive, a: agglutinative; types of partition: A: no partition, B: horizontal partitions (Ba: partition wall, Bb: ridge, Bc: one room, Bd: multiple rooms, Be: three rooms-megaroid type), C: vertical partitions (Ca: buttresses, Cb: basement, Cc: 'staircase', second floor?); access: a: one entrance, b: more than one entrance, c: court included in the house plan, range of size : the number in parenthesis refers to the number of structures on which the estimates are made. [see also app. I]

Illustration 18: Features found inside the structures.

	hearths	platforms	fixed containers	posts	pits	burials	other
ACERAMIC							
Shillourokambos	–	–	–	*	*	–	
Khirokitia	*	*	*	*	*	*	wall painting
Kalavassos	*	*	–	*	*	*?	wall painting
Cape Andreas	*	–	*	*	*	?	
Limnitis	*	–	–	*	*	–	
CERAMIC							
Sotira	*	*	*	*	*	–	
Ayios Epiktitos	*	*	*	*	*	–	
Klepini	–	–	–	–	–	–	
Kantou	*	*	–	*	*	–	

Note: burials: a: burials, a': secondary burials, b: plastered skulls

Illustration 19: Features found outside.

	hearths	platforms	fixed containers	pits	posts	burials
ACERAMIC						
Shillourokambos	–	–	–	*	*	–
Khirokitia	*	–	*	*	*	*
Kalavassos	*	*		*	*	*
Cape Andreas	*		–	*	*	*
Limnitis	–	–	*	*	*	*
			–	–	–	–
CERAMIC						
Sotira	–	–	–	–	–	–
Ayios Epiktitos	*	*		*	*	
Klepini	–	–	–	–	–	–
Kantou	*		-	*	*	–
		–				

Note: burials: a: burials, a': secondary burials, b: plastered skulls

Illustration 20: Comments on the nature of the contextual information.

	nature of deposition (high / low)
ACERAMIC	
Shillourokambos	rather high, scatters of finds inside and outside the str.
Khirokitia	rather low, mainly outside and in between str.
Kalavassos	limited and selective info.
Cape Andreas	rather high, mainly outside the str.
Limnitis	considerable number of finds, bur limited and selective info.
CERAMIC	
Sotira	rather high, mainly inside the str.
Ayios Epiktitos	rather high, mainly inside the str.
Klepini	rather low, limited info. (Dikaios 1962:72)
Kantou	rather high, numerous tools inside and outside the str.

Illustration 21: Finds associated with particular floors.

	layer	structure	type of finds
ACERAMIC			
Shillourokambos			
Khirokitia			(see analysis-chapter IV)
Kalavassos			
Cape Andreas			
Limnitis	III	house	chisel, awl, bone pin, 3 bone needles, 2 idols of dolerite, bead.
CERAMIC			
Sotira			(see analysis-chapter IV)
Ayios Epiktitos			(see analysis-chapter IV)
Klepini	LNIb	house	stone grinder, stone ornament
Kantou			

Illustration 22: The recording system and the presentation of the material in each publication.

	architecture		stratigraphy			description of architecture			description of finds		
	complete units	preservation	by phase	by structure	by floor	by phase	by structure	by floor	by layer	by structure	by floor
ACERAMIC											
Shillourokambos	*?	b	*	*	*	*	*	–	*	*	–
Khirokitia	*	a	*	*	*	*	*	*	*	*	*
Kalavassos	*	a	*	*	–	*	*	–	*	*	–
Cape Andreas	*?	b	*	*	*	*	*	*	*	*	*
Limnitis	–	b	*	*	*	*	*	*	selective	selective	selective
CERAMIC											
Sotira	*	a	*	*	*	*	*	*	*	*	*
Ayios Epiktitos	*	a	*	*	*	*	*	*	*	*	*
Klepini	–	b	*	–	–	*	–	–	*	–	–
Kantou	*?	a	*	*	*	*	*	*	*	*	–

Note: preservation: a: well preserved, b: poorly preserved, walls or floors are difficult to identify (for details see ill. 15)

Illustration 23: Khirokitia (Le Brun): Distribution of units in the east sector

	Phase					
	G / F	**E**	**D**	**C**	**B**	**A**
Structures						
S.115		? *	C			
S.116	[*	1' 2' 3'				
S.117			? *	5 6	15'	
S.118			? *	7 8'	16'	
S.119				? *	17' 18'	
S.120					2'	
S.121				(S. 139)	(S. 120) 20' 21' 22'	
S.122		? C	4'	9' 10	23' 24'	
S.123					? *	44'
S.124					? (S. 131) 25'	45'
S.125				(S. 140)	26 27 28 C	46'
S.126				? *	29 30 31 32' 33'	
S.127					(S. 142)	47'
S.130				? *	34'	
S.131					? 35	
S.132					36'	
S.133				(S. 136)	37' 38' 39'	
S.134				? *	C C C 40'	
S.135					C C C	
S.136				? 11' 12' 13' 14'		
S.137					? * 41	
S.138					? * 42' 43'	
S.139				? C		
S.140				? C		
S.142					C	

Note: [: bedrock reached, ? : bedrock not reached
* : traces of occupation (but no traces of wall), C: traces of occupation (too eroded but with structural remains/walls)
numbers without an apostrophe: undisturbed units, **numbers with an apostrophe**: disturbed units
underlined: units undisturbed and completely excavated and preserved (used in level II of analysis)
in parenthesis: underlying structures

Illustration 24: Khirokitia (Le Brun): Distribution of units in the west sector

	Phase						
	IV	**IIIb**	**IIIa**	**II**	**Ic**	**Ib**	**Ia**
Structures							
S.82				? (S. 93)	38		
S.83				? *	39	C	
S.84			(S. 90)	24 25	40'		
S.85		? 1 2' 3'	4'	26	41'		
S.86			(S. 87)	27'			
S.87	[*	5	6				
S.88			? (S. 103)	28 29'			
S.89			? (S. 108)	30	42 43		
S.90	[*	7					
S.91				(S. 97)	44'		
S.92				? 31'			
S.93		(S. 98)	8'				
S.94		? 9	10 11	32	45'	*	
S.95				? (S. 100)	46		C
S.96				? (S. 102)	47		
S.97		? *	12'	33'			
S.98		? 13'					
S.99		? 14	15'				
S.100				? 34'			
S.101		? C					
S.102			? 16	35 36 37			
S.103		? 17'	18'				
S.104		? C	C	C			
S.105		? 19 20'	21'				
S.106					? 48'	49'	50'
S.107			? 22				
S.108			? 23				
S.111						? *	C
S.112				? *	51'		
S.114		? C					

Note: [: bedrock reached, ? : bedrock not reached

* : traces of occupation (but no traces of wall), **C**: traces of occupation (too eroded but with structural remains/walls)

numbers without an apostrophe: undisturbed units, **numbers with an apostrophe**: disturbed units

underlined: units undisturbed and completely excavated and preserved (used in level II of analysis)

in parenthesis: underlying structures

Illustration 25: (Le Brun): Distribution of units according to the Data Quality Control Factors / East sector.

PHASE E

units	excavated/ preserved A	partly excavated/ preserved B	excavated/partly preserved C	partly excavated/ partly preserved D	total
undisturbed ( ) disturbed (')			3		
total			3		3

PHASE D

units	excavated/ preserved A	partly excavated/ preserved B	excavated/partly preserved C	partly excavated/ partly preserved D	total
undisturbed ( ) disturbed (')			1		
total			1		1

PHASE C

units	excavated/ preserved A	partly excavated/ preserved B	excavated/partly preserved C	partly excavated/ partly preserved D	total
undisturbed ( )	4				4
disturbed (')			6		6
total	4		6		10

PHASE B

units	excavated/ preserved A	partly excavated/ preserved B	excavated/partly preserved C	partly excavated/ partly preserved D	total
undisturbed ( )	8				8
disturbed (')	1	1	18	1	21
total	9	1	18	1	29

PHASE A

units	excavated/ preserved A	partly excavated/ preserved B	excavated/partly preserved C	partly excavated/ partly preserved D	total
undisturbed ( ) disturbed (')	1	2	2		4
total	1	2	2		4

Illustration 26: Khirokitia (Le Brun): Distribution of units according to the Data Quality Control Factors / West sector.

PHASE III

units	excavated/ preserved A	partly excavated/ preserved B	excavated/partly preserved C	partly excavated/ partly preserved D	total
undisturbed ( )	7	1	3	1	12
disturbed (')		2	9	1	11
total	7	3	12	1	23

PHASE II

units	excavated/ preserved A	partly excavated/ preserved B	excavated/partly preserved C	partly excavated/ partly preserved D	total
undisturbed ( )	8		1		9
disturbed (')	1	1	3		5
total	9	1	4		14

PHASE I

units	excavated/ preserved A	partly excavated/ preserved B	excavated/partly preserved C	partly excavated/ partly preserved D	total
undisturbed ( )	5		1		6
disturbed (')	3		1	4	8
total	8		2	4	14

Illustration 27: Khirokitia (Le Brun): General characteristics of size and segmentation types in each sector and phase.

EAST SECTOR	*Phase F/G*	*Phase E*	*Phase D*	*Phase C*	*Phase B*	*Phase A*
structures excavated	2?	3	5	11	19	5
structures used in analysis	-	1	1	4	16	4
no. of floors/units		3	1	10	29	4
size in m^2		8.30?	12.25	2.40 - 16.95	2.00 - 12.00	3.14 - 5.95
types of segmentation		Ca	Ca	A, Ba, Ca, Ca/Bb, Ca/Ba	A, Ba, Ca/Bb, Ba/Bb	A, Ca?

Note: types of segmentation: A: no partitions, A': no partitions but adjacent to another structure,
Ba: partition wall, Bb: low partition (ridge),
Ca: Pillar / buttress (loft/upper floor ?) [see app. I, V:8]

WEST SECTOR	*phase IV*	*phase III*	*phase II*	*phase I*
structures excavated	2?	19	13	12
structures used in analysis	-	13	10	11
no. of floors/units	-	23	14	14
size in m^2	-	2.00 - 8.55	3.15 - 8.55	1.90 - 17.20
types of segmentation	-	A, Ba, Bc, Ca, Bb, Ca/Ba?	A, Ba, Bc	A, Ba, Bc

Note: types of segmentation: A: no partitions, A': no partitions but adjacent to another structure,
Ba: partition wall, Bb: low partition (ridge), Bc: partition wall forming an enclosed area
Ca: Pillar / buttress (loft/upper floor ?) [see app. I, V:8]

Illustration 28: Khirokitia (Le Brun): Relation between size (m^2) and segmentation types / east sector

		types of segmentation						
		A	Ba	Ca	Bb	Ca/Ba	Ca/Bb	Ba/Bb
buildings	**units/floors**							
Phase E								
B. 116	1'			8.30?				
	2'			8.30?				
	3'			8.30?				
Phase D								
B. 122	4'			12.25				
Phase C								
B. 117	**5**						**16.66**	
	6						**16.95**	
B. 118	**7**	**2.40**						
	8'	2.40						
B. 122	9'			12.10				
	10					**12.10**		
B. 136	11'		4.15					
	12'		4.15					
	13'	4.15						
	14'	4.15						
Phase B								
B. 117	15'			?				
B. 118	16'		2.40					
B.119	17'	2.00?						
	18'	2.00?						
B. 120	19'	.5.95?						
B. 121	20'	7.55?						
	21'	7.55?						
	22'	7.55?						
B. 122	23'		12.00					
	24'	12.00						
B. 124	25'	4.30?						
B. 125	**26**	**7.15**						
	27							**7.15**
	28		**3.38**					
B. 126	**29**				**3.88**			
	30	**3.88**						
	31	**3.46**						
	32'	4.50?						
	33'	4.50?						
B. 130	34'	3.80						
B. 131	**35**			**2.83**				
B. 132	36'	5.72?						
B. 133	37'	4.90?						
	38'	4.90?						
	39'	4.90?						
B. 134	40'	2.30?						
B. 137	**41**	**4.24**						
B. 138	42'	9.00?						
	43'	9.00?						
Phase A								
B. 123	44'			(5.95)				
B. 124	45'	4.30?						
B. 125	46'	.3.14?						
B. 127	47'	3.80?						

Note: **unit numbers with an apostrophe:**disturbed units, **unit numbers without an apostrophe**: undisturbed units
size estimation: all in m^2, questionmark (?): indicates approximate estimation (usually due to erosion),
parenthesis: unclear type of segmentation
types of segmentation: A: no partitions, A' : no partitions but adjacent to other structures
Ba: partition wall, Bb: low partition (ridge) Bc: partition wall forming an enclosed area, Ca: pillar/buttress (loft ?) [see app. I, V:8]
underlined units: units / floors used in level II of analysis (undisturbed, completely preserved and excavated)

Illustration 29: Khirokitia (Le Brun): Relation between size and segmentation types / west sector.

		types of segmentation					
		A	Ba	Bc	Ca	Bb	Ca/Ba
structures	**units**						
Phase III							
S. 85	**1**	.	**2.38**				
	2'					3.65	
	3'	3.65					
	4'		3.45				
S. 87	**5**		**5.70**				
	6		**5.70**				
S. 90	7		4.50				
S. 93	8'	4.90					
S. 94	**9**		**3.80**				
	10		**3.80**				
	11	**3.80**					
S. 97	12'			8.55			
S. 98	13'	2.00?					
S. 99	14	2.00					
	15'	2.00					
S. 102	16		?				
S. 103	17'	2.00?					
	18'	2.00?					
S. 105	19						(7.00?)
	20'				7.00		
	21'		7.00				
S. 107	22		3.80				
S. 108	**23**		**3.15**				
Phase II							
S. 84	**24**			**4.50**			
	25			**4.50**			
S. 85	**26**	**3.45**					
S. 86	27'	5.30?					
S. 88	28	.		8.00			
	29'			8.00			
S. 89	**30**	**6.60**					
S. 92	31'		3.15				
S. 94	**32**	**3.15**					
S. 97	33'		8.55				
S. 100	34'			8.00			
S. 102	**35**		**3.30**				
	36		**3.30**				
	37	**3.35**					
Phase I							
S. 82	**38**			**4.95**			
S. 83	**39**	**2.15**					
S. 84	40'			1.90			
S. 85	41'	3.45					
S. 89	**42**		**6.15**				
	43		**6.15**				
S. 91	44'	4.15					
S. 94	45'	4.00					
S. 95	**46**		**5.30**				
S. 96	47	15.20					
S. 106	48'	10.20					
	49'		10.20				
	50'	8.55					
S. 112	51'	17.20?					

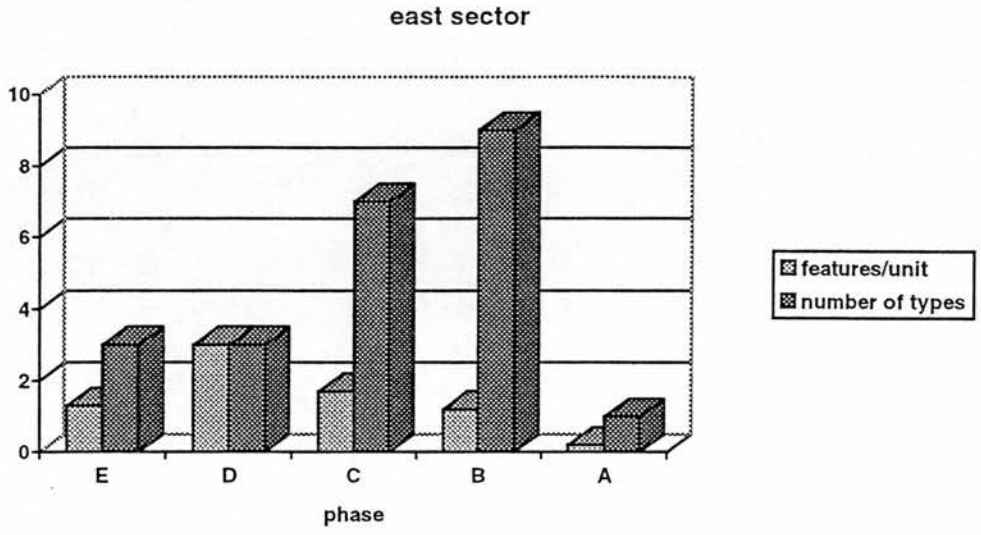
Note: **unit numbers with an apostrophe:** disturbed units, **unit numbers without an apostrophe**: undisturbed units

size estimation: all in m^2, questionmark (?): indicates approximate estimation (usually due to erosion), parenthesis: unclear type of segmentation

types of segmentation: A: no partitions, A' : no partitions but adjacent to other structures
Ba: partition wall, Bb: low partition (ridge) Bc: partition wall forming an enclosed area C: pillar/buttress (loft ?) [see app. I, V:8]

underlined units: units / floors used in level II of analysis (undisturbed, completely preserved and excavated)

Illustration 30: Khirokitia (Le Brun): Average number of features per unit in each phase, and number of types of features per phase in both sectors.



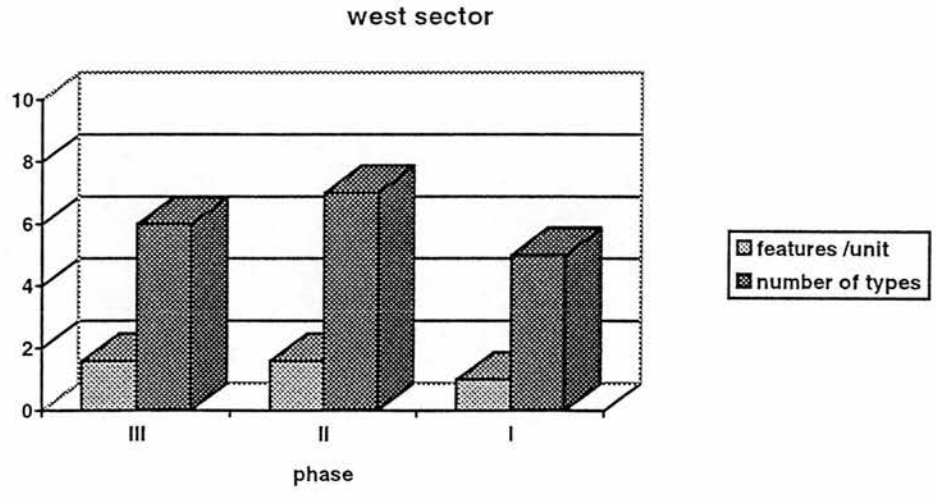
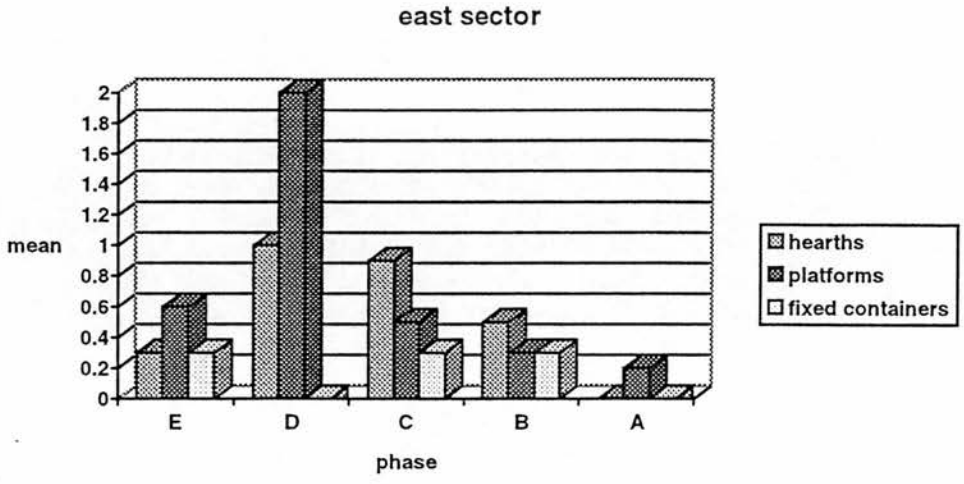


Illustration 31: Khirokitia (Le Brun): Average number of features (hearths, platforms and fixed containers) per unit in each phase and sector.



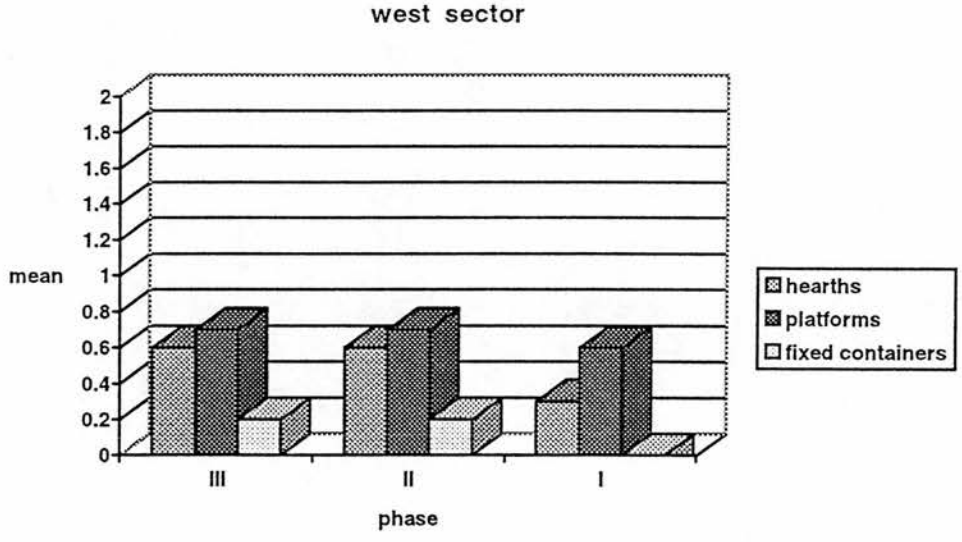
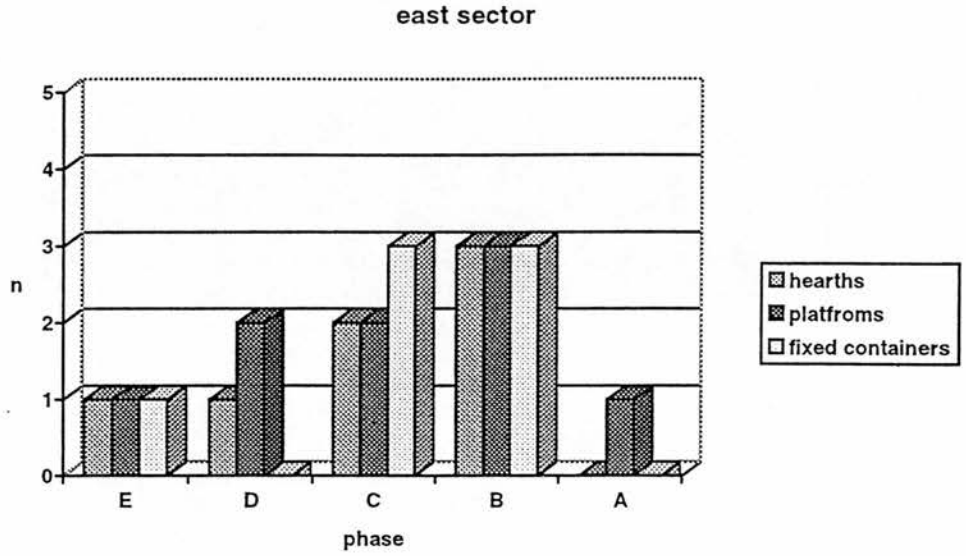


Illustration 32: Khirokitia (Le Brun): Distribution of the types of features (hearths, platforms, fixed containers) per phase and sector.



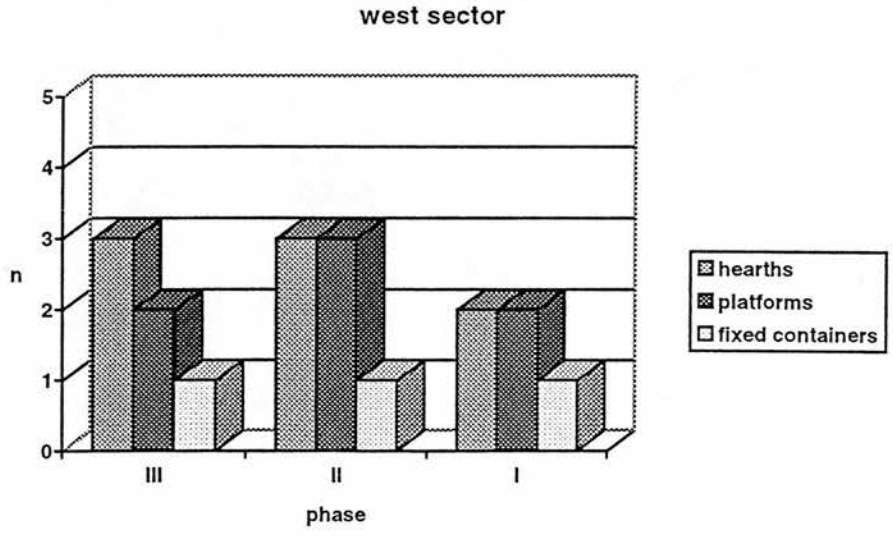
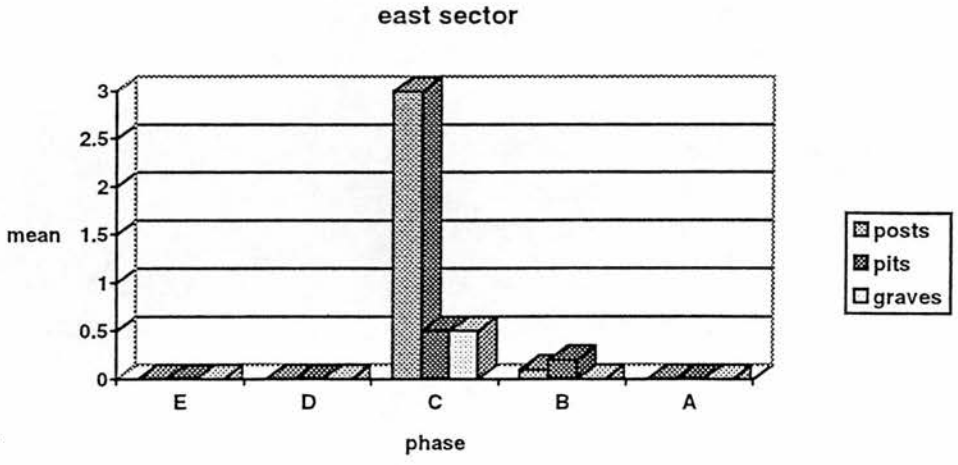


Illustration 33: Khirokitia (Le Brun): Average number of posts, pits and graves per unit, in each phase and sector.



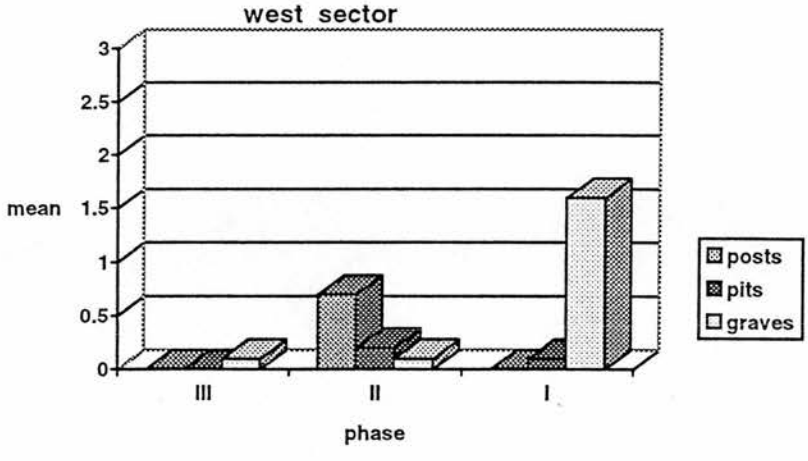
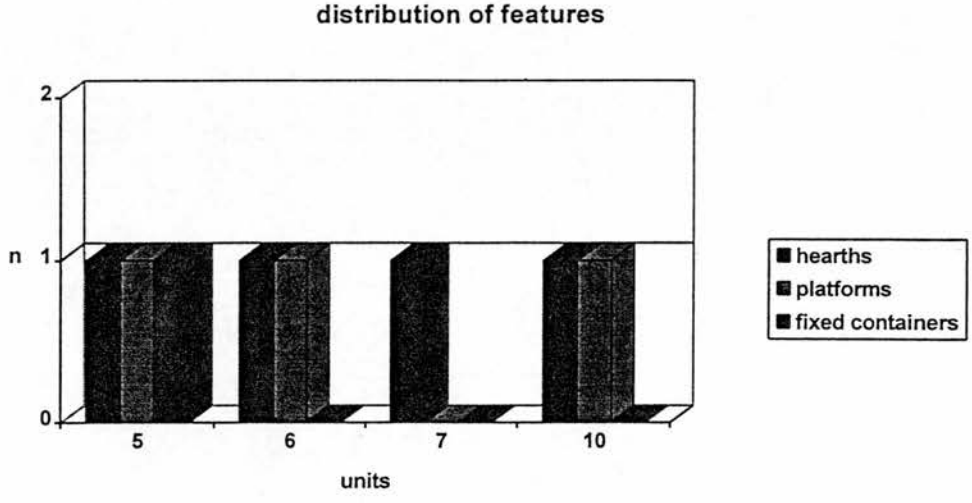


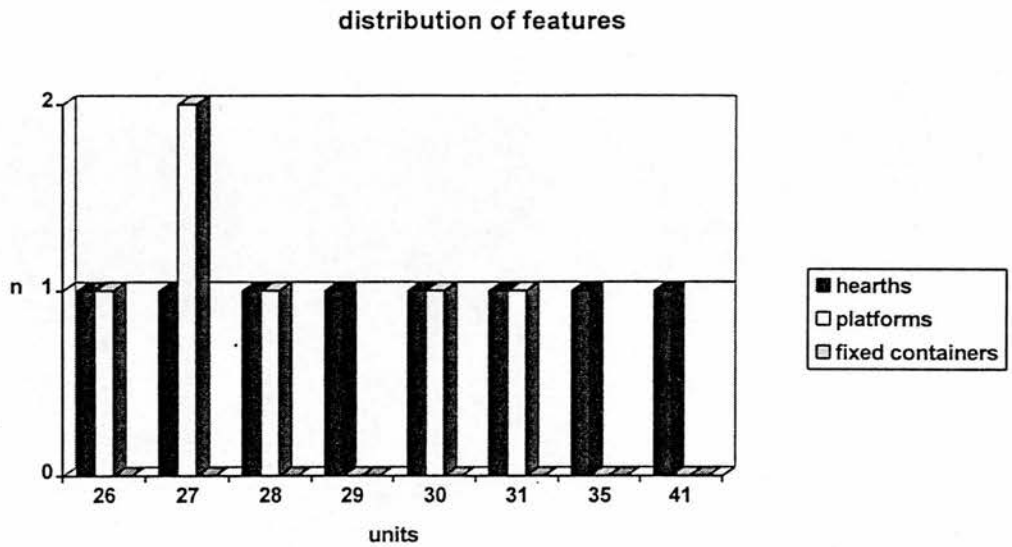
Illustration 34: Khirokitia (Le Brun): East sector, phase C: Distribution of features.



building	117		118	122
units	5	6	7	10
size in m^2	16.66	16.95	2.40	12.10
type of segmentation	Ca/Bb	Ca/Bb	A	Ca/Ba

Note: types of segmentation: A: no partition, Ba: partition wall, Bb: low partition (ridge), Ca: pillar/buttress

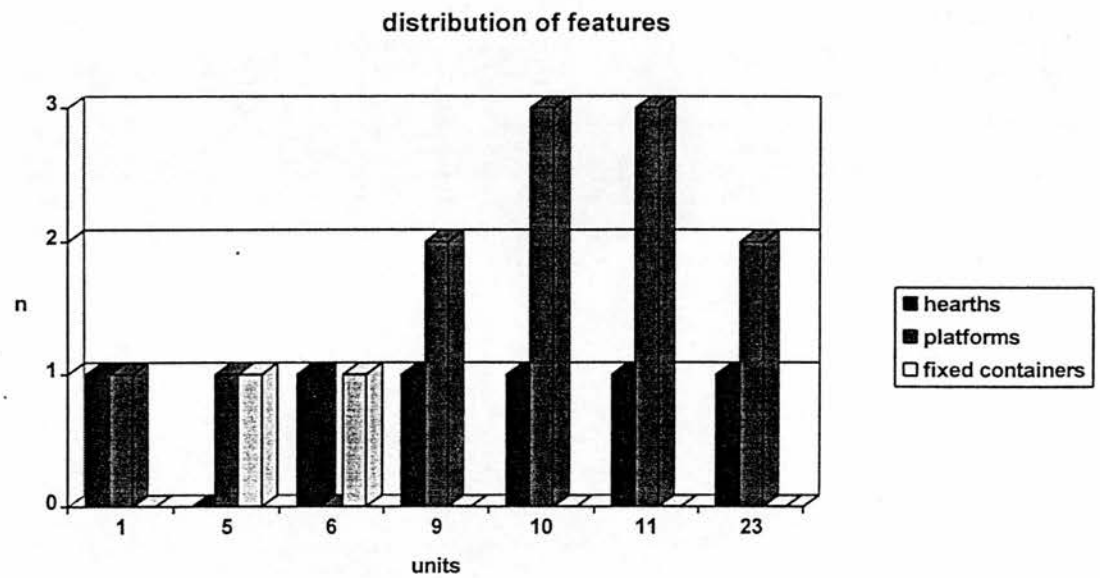
Illustration 35: Khirokitia (Le Brun): East sector, phase B: Distribution of features.



building	125			126			131	137
units	26	27	28	29	30	31	35	41
size in m^2	7.15	7.15	3.38	3.88	3.88	3.46	2.83	4.24
type of segmentation	A	Ba/Bb	Ba	Bb	A	A	Ca	A

Note: types of segmentation: A: no partitions, Ba: partition wall, Bb: low partition (ridge), Ca: pillar/buttress

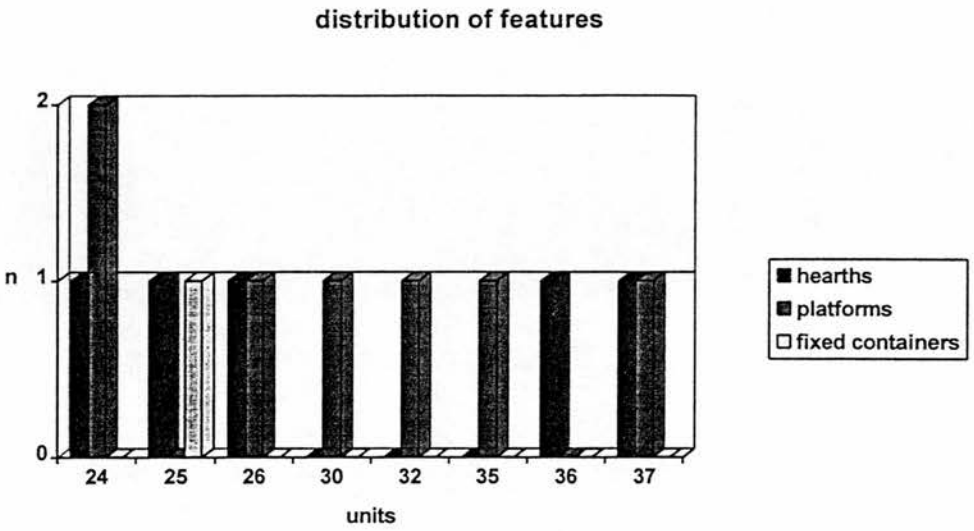
Illustration 36: Khirokitia (Le Brun): West sector, phase III: Distribution of features.



building	85	87		94			108
units	1	5	6	9	10	11	23
size in m^2	2.38	5.70	5.70	3.80	3.80	3.80	3.15
type of segmentation	Ba	Ba	Ba	Ba	Ba	A	Ba

Note: types of segmentation: A: no partition, Ba: partition wall

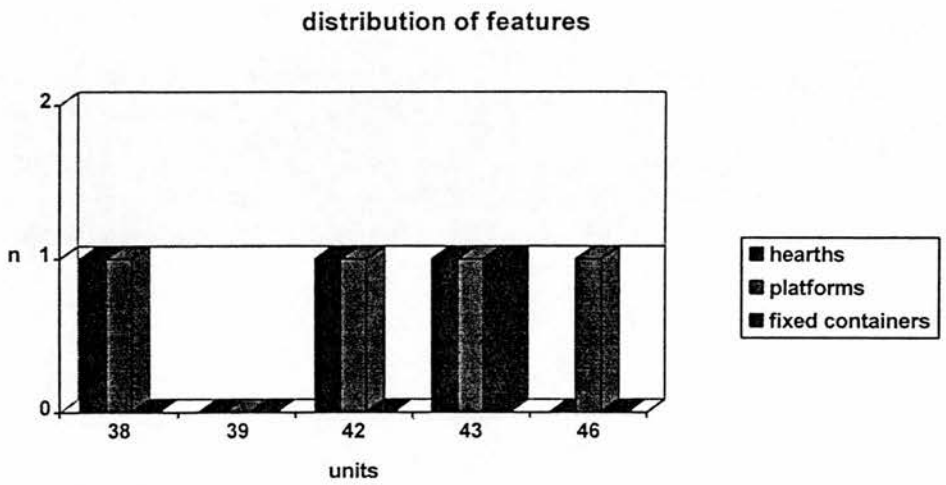
Illustration 37: Khirokitia (Le Brun): West sector, phase II: Distribution of features.



building	84		85	89	94	102		
units	24	25	26	30	32	35	36	37
size in m^2	4.50	4.50	3.45	6.60	3.15	3.30	3.30	3.35
type of segmentation	Bc	Bc	A	A	A	Ba	Ba	A

Note: types of segmentation: A: no partition, Ba: partition wall, Bc: partition wall forming an enclosed area

Illustration 38: Khirokitia (Le Brun): West sector, phase I: Distribution of features.



building	82	83	89		95
units	38	39	42	43	46
size in m^2	4.95	2.15	6.15	6.15	5.30
type of segmentation	Bc	A	Ba	Ba	Ba

Note: types of segmentation: A: no partition, Ba: partition wall, Bc: partition wall forming an enclosed area

Illustration 39: Khirokitia (Dikaios): Distribution of units in the east sector.

Buildings	*Phase I*	*Phase II*	*Phase III*
BI (II)		? 23'	
BII (IV)	[*		
(III)		C	
(II)		C	
(I)			C
BVII (I)			? 101 102 103'
BVIII (II)		? 43' 44	
(I)			104' C
BXVII (III)	[*		
(II)		63' 64'	
(I)			*
BXVIII (I)			? 106' 107'
BXXII (III)	[C		
(II)	11'		
(I)		70 71 72'	
BXXVI (II)		? 80	
(BXXVII)	[*		
BXXVII (I)		81' 82 83	
BXXVIII (II)		? 84'	
BXXIX (II)		? 85	
BXXX (II)		? C	
BXXXI (II)		? C	
BXXXIV (II)	? C		
BXXXV (I)			C
BXXXVI (I)			? 108' 109' 110' C
BXXXVII (I)			? 111' *
BXL (V-IV)	? *		
(III)	*		
(II)		86'	
(I)			*
BXLII (I)			? 112'
BXLIII (II)		87'	
(I)			C

Note: **[** : bedrock reached, **?** : bedrock not reached

***** : traces of occupation (but no traces of wall), **C**: traces of occupation (too eroded but with structural remains/walls)

numbers without an apostrophe: undisturbed units, **numbers with an apostrophe (')** : disturbed units

underlined: units undisturbed and completely excavated and preserved (used in level II of analysis)

Illustration 40: Khirokitia (Dikaios): Distribution of units in the west sector.

Buildings	*Phase I*	*Phase II*	*Phase III*
BIA (III)	[*		
(II)		12' 13' 14' 15' 16	
(I)			*
(BIII)	[* * 1 2 3		
BIII (I)		24 25 26' 27 28 29' 30 31' 32' 33' 34'	99'
BIV (I)			100'
BV		[35 36 37' 38' 39' 40 41 42'	C
BX (V)	[* 4 5 6'		
(IV)	C 7		
(III)	8 9' 10'		
(II)		C 45' 46' 47 48' C	
(I)			105 C
(BXI)		? *	
BXI (II)		19 20	
(I?)			C
(BXIIA)		? *	
BXIIA (II)		21' 22 C	
BXV (IV)	[*		
(III)	C C		
(II)		49' 50 51 52' 53' 54 55' 56' 57' 58' 59' 60'	C
BXV-A		? 61' 62'	
(BXVI)		? C	
BXVI (II)		17 18'	
BXIX (II)	[*		
(II-I)		C 65' 66' 67' 68'	
BXX (II)	[*		
(I)		69	
BXXIII (III)	[*		
(II)	*		
(I)		73'	
BXXIV (III)	? *		
(I)		74 75 76'	
BXXV (III)	[*		
(II)	*		
(I)		C 77' 78' 79' C	
BXLV (III-II)	? *		
(I)		88' 89' 90'	
BXLVII (II)	[*		
(I)		91' 92' 93' 94' 95' 96 97' 98'	

Note: [: bedrock reached, **?** : bedrock not reached

* : traces of occupation(but no traces of wall), **C**: traces of occupation (too eroded but with structural remains/walls)

numbers without an apostrophe: undisturbed units, **numbers with an apostrophe (')** : disturbed units

underlined: units undisturbed and completely excavated and preserved (used in level II of analysis)

Illustration 41: Khirokitia (Dikaios): Distribution of units according to the Data Quality Control Factors / east sector.

phase I

units	excavated/ preserved A	partly excavated/ preserved B	excavated/partly preserved C	partly excavated/ partly preserved D	total
undisturbed ( )					
disturbed (')		1			
total		1			1

phase II

units	excavated/ preserved A	partly excavated/ preserved B	excavated/partly preserved C	partly excavated/ partly preserved D	total
undisturbed ( )	7				7
disturbed (')	7		2		9
total	14		2		16

phase III

units	excavated/ preserved A	partly excavated/ preserved B	excavated/partly preserved C	partly excavated/ partly preserved D	total
undisturbed ( )	2				2
disturbed (')	7		2		9
total	9		2		11

Illustration 42: Khirokitia (Dikaios): Distribution of units according to the Data Quality Control Factors / west sector.

phase I

units	excavated/ preserved A	partly excavated/ preserved B	excavated/partly preserved C	partly excavated/ partly preserved D	total
undisturbed ( )	1	6			7
disturbed (')				3	7
total	1	6		3	10

phase II

units	excavated/ preserved A	partly excavated/ preserved B	excavated/partly preserved C	partly excavated/ partly preserved D	total
undisturbed ( )	19	1	2		22
disturbed (')	17		31	1	49
total	36	1	33	1	71

phase III

units	excavated/ preserved A	partly excavated/ preserved B	excavated/partly preserved C	partly excavated/ partly preserved D	total
undisturbed ( )	1				1
disturbed (')	1		1		2
total	2		1		3

Illustration 43: Khirokitia (Dikaios): General characteristics between size and segmentation types in each phase and sector.

	East sector			*West sector*		
	phase I	phase II	phase III	phase I	phase II	phase III
structures excavated	8	14	11	16	19	7
structures used in analysis	1	10	6	4	16	3
no. of floors/units	1	16	11	10	71	3
size in m^2	>2.50	3.70-20.90	3.00-14.60	>4.60-11.20	1.50-30.40	5.10-7.40
types of segmentation	A?	A, A', Ba, Bc, A'/Ca	A, A'?, Ba?, Ca, A'/Ba?	A, Ba/Bb	A, A', Ba, Bc, Ca, Ca/Ba, A'/Ca	A

Note: types of segmentation: A: no partitions, A': no partitions but adjacent to other structures
Ba: partition wall, Bb: low partition (ridge), Bc: partition wall forming a separate room,
Ca: Pillar / buttress (loft/upper floor ?) [see app. I, V:8]

Illustration 44: Khirokitia (Dikaios): Relation between size and segmentation types in phase I.

		types of segmentation				
		A	A'	Ba	Ca	Ba/Bb
buildings	**units**					
east						
BXXII (III)	11'	(>2.50)				
west						
(BIII)	1	>4.60				
	2	>4.60				
	3	>4.60				
BX (V)	4	>5.70				
	5	>5.70				
	6'	>5.70				
BX (IV)	7	**5.70**				
BX (III)	8	5.70				
	9'					11.20
	10'	11.20				

Note: **unit numbers with an apostrophe (') :** disturbed units,
unit numbers without an apostrophe: undisturbed units
size estimation: all in m^2, questionmark (?): indicates approximate estimation (usually due to erosion), parenthesis: unclear type of segmentation
types of segmentation: A: no partitions, A' : no partitions but adjacent to other structures
Ba: partition wall, Bb: low partition (ridge), Bc: partition wall forming an enclosed area, Ca: pillar/buttress (loft ?) [see app. I, V:8]
underlined units: units / floors used in level II of analysis (undisturbed, completely preserved and excavated)

Illustration 45: Relation between size and segmentation types in phase II (east sector).

		types of segmentation						
		A	A'	Ba	Bc	Ca	Ca/Ba	A'/Ca
buildings	**units**							
BI (II)	23'	5.00						
BVIII (II)	43'	5.00						
	44	**5.00**						
BXVII (II)	63'	(20.90)						
	64'	(20.90)						
BXXII (I)	**70**			**6.50**				
	71			**(11.00)**				
	72'	(11.00)						
BXXVI (II)	**80**				**6.10**			
BXXVII (I)	81'							3.70
	82							**3.70**
	83		**3.70**					
BXXVIII (II)	84'		3.00					
BXXIX (II)	**85**		**3.60**					
BXL (II)	86'	(7.00)						
BXLIII (II)	87'	6.30						

Note: **unit numbers with an apostrophe ('):** disturbed units,
unit numbers without an apostrophe: undisturbed units
size estimation: all in m^2, questionmark (?): indicates approximate estimation (usually due to erosion), parenthesis: unclear type of segmentation
types of segmentation: A: no partitions, A' : no partitions but adjacent to other structures
Ba: partition wall, Bb: low partition (ridge), Bc: partition wall forming an enclosed area, C: pillar/buttress (loft ?) [see app. I, V:8]
underlined units: units / floors used in level II of analysis (undisturbed, completely preserved and excavated)

Illustration 46: Relation between size and segmentation types in phase II (west sector).

		types of segmentation						
		A	A'	Ba	Bc	Ca	Ca/Ba	A'/Ca
buildings	**units**							
BIA (II)	12'					26.60		
	13'					26.60		
	14'					30.40		
	15'					30.40		
	16					**30.40**		
BXVI (II)	17	(4.00)						
	18'	(2.00)						
BXI (II)	19	(8.00)						
	20	(8.00)						
BXIIA (II)	21'	9.00						
	22	**9.00**						
BIII (I)	**24**	**4.50**						
	25	**4.50**						
	26'				4.50			
	27				**4.50**			
	28	**4.50**						
	29'	4.50						
	30	**1.80**						
	31'	1.50						
	32'	1.50						
	33'	7.40						
	34'	7.40						
BV	**35**				**5.40**			
	36	**5.40**						
	37'	6.20						
	38'	6.20						
	39'	5.80						
	40			**5.80**				
	41	**5.80**						
	42'	5.80						
BX (II)	45'				4.60			
	46'	(4.60)						
	47	**6.80**						
	48'			(6.80)				
BXV (II)	49'		(4.00)					
	50		**4.00**					
	51		**4.00**					
	52'		4.00					
	53'		4.00					
	54		**4.00**					
	55'		5.70					
	56'		(5.70)					
	57'		5.70					
	58'		7.70					
	59'		7.70					
	60'		7.70					
BXV-A	61'		5.50					
	62'		5.50					
BXIX (II-I)	65'	15.00						
	66'	15.00						
	67'	15.00						
	68'	15.00						
BXX (I)	**69**					**17.20**		
BXXIII (I)	73'	9.90						
BXXIV (I)	**74**					**6.10**		
	75						**6.10**	
	76'						6.10	
BXXV (I)	77'	15.40						
	78'	15.40						
	79'	15.40						
BXLV (I)	88'					(17.10)		
	89'					(17.10)		

	90'	(17.10)				
BXLVII (I)	91'	8.60				
	92'					8.60
	93'	(8.60)				
	94'			8.60		
	95'				8.60	
	96				**8.60**	
	97'	(8.60)				
	98'	(8.60)				

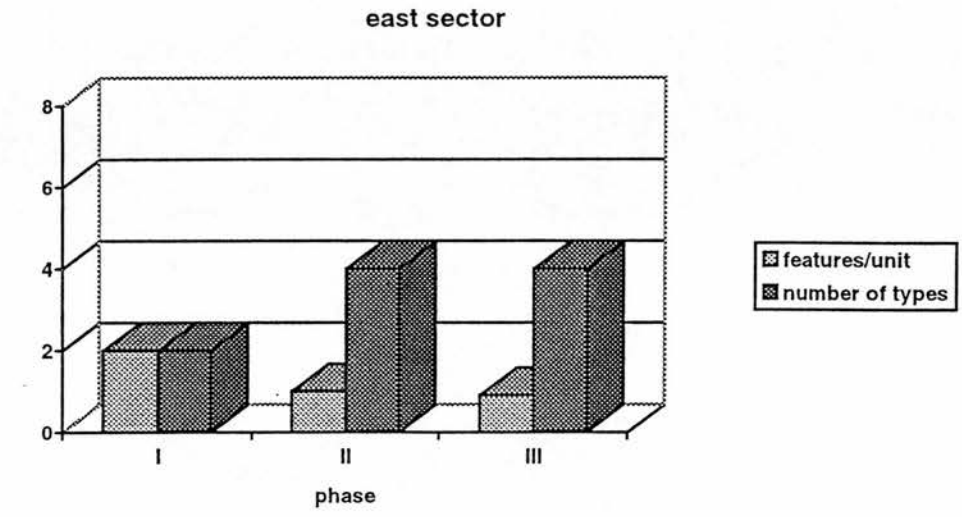
Note: **unit numbers with an apostrophe ('):** disturbed units,
unit numbers without an apostrophe: undisturbed units
size estimation: all in m^2, questionmark (?): indicates approximate estimation (usually due to erosion),
parenthesis: unclear type of segmentation
types of segmentation: A: no partitions, A' : no partitions but adjacent to other structures
Ba: partition wall, Bb: low partition (ridge), Bc: partition wall forming an enclosed area, C: pillar/buttress (loft ?) [see app. I, V:8]
underlined units: units / floors used in level II of analysis (undisturbed, completely preserved and excavated)

Illustration 47: Relation between size and segmentation type in phase III.

		types of segmentation				
		A	A'	Ba	Ca	A'/Ba
buildings	**units**					
east						
BVII (I)	**101**	**7.80**				
	102	**7.80**				
	103'				7.80	
BVIII (I)	104'			(14.60)		
BXVIII (I)	106'	10.00				
	107'	10.00				
BXXXVI (I)	108'					(7.10)
	109'		(7.10)			
	110'		(7.10)			
BXXXVII (I)	111'		(3.70)			
BXLII (I)	112'		(3.00)			
west						
BIII (I)	99'	7.40				
BIV (I)	100'	(5.10)				
BX (I)	**105**	**6.00**				

Note: **unit numbers with an apostrophe ('):** disturbed units,
unit numbers without an apostrophe: undisturbed units
size estimation: all in m^2, questionmark (?): indicates approximate estimation (usually due to erosion),
parenthesis: unclear type of segmentation
types of segmentation: A: no partitions, A' : no partitions but adjacent to other structures
Ba: partition wall, Bb: low partition (ridge), Bc: partition wall forming an enclosed area, C: pillar/buttress (loft ?) [see app. I, V:8]
underlined units: units / floors used in level II of analysis (undisturbed, completely preserved and excavated)

Illustration 48: Khirokitia (Dikaios): Average number of features per unit in each phase, and number of types of features per phase in both sectors.



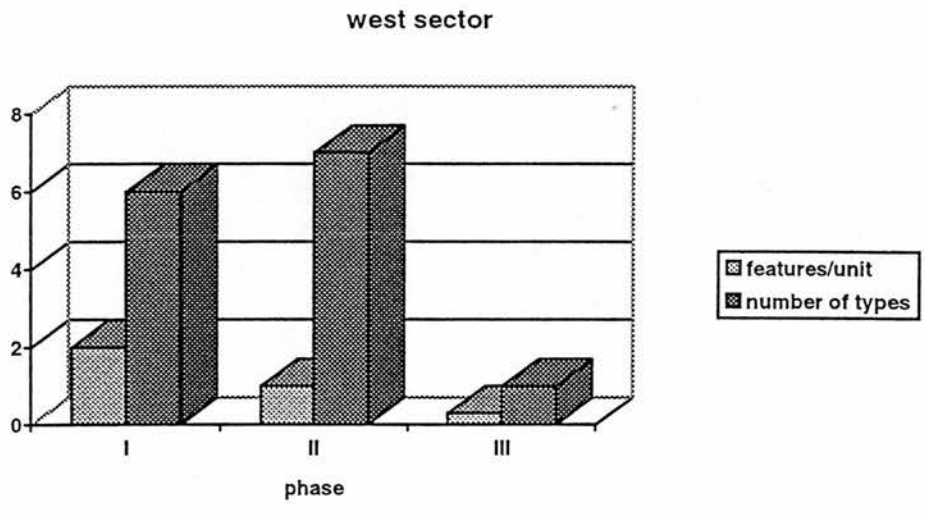
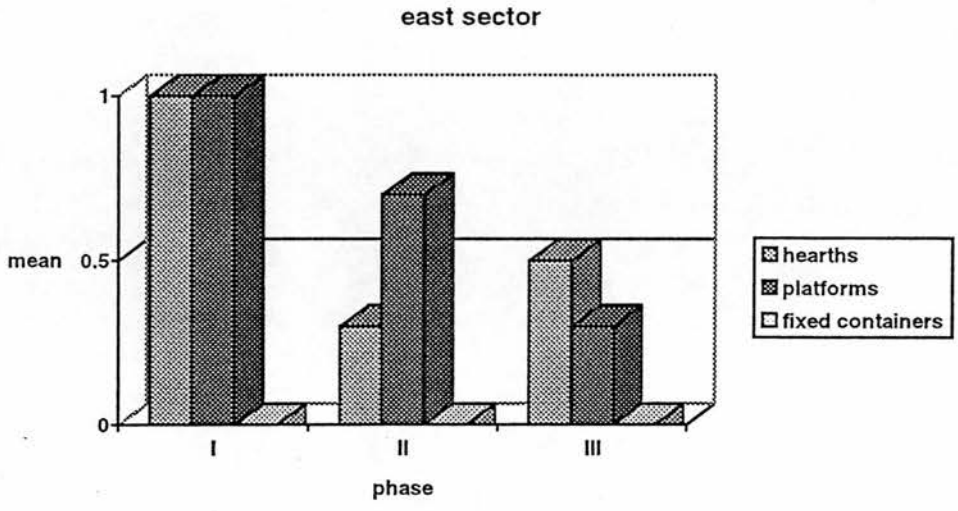


Illustration 49: Khirokitia (Dikaios): Average number of features (hearths, platforms, fixed containers) per unit, in each phase and sector.



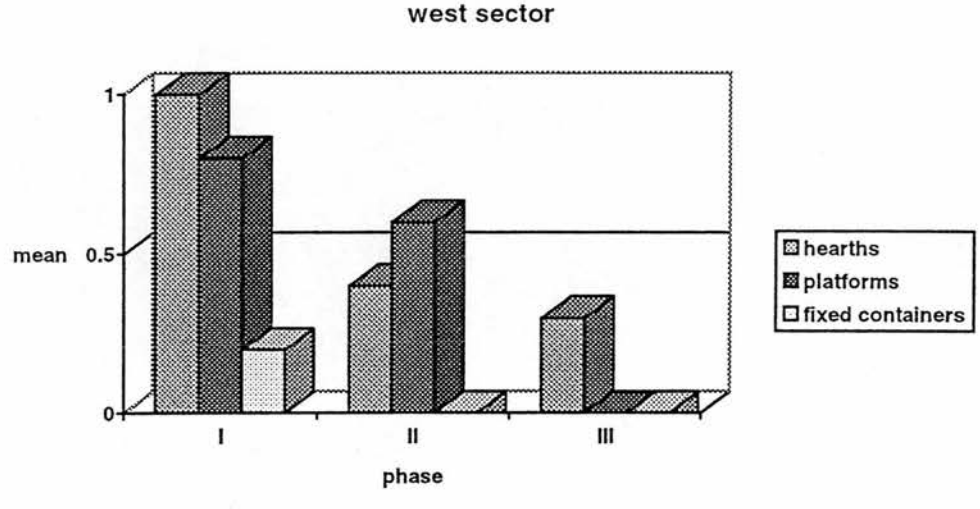
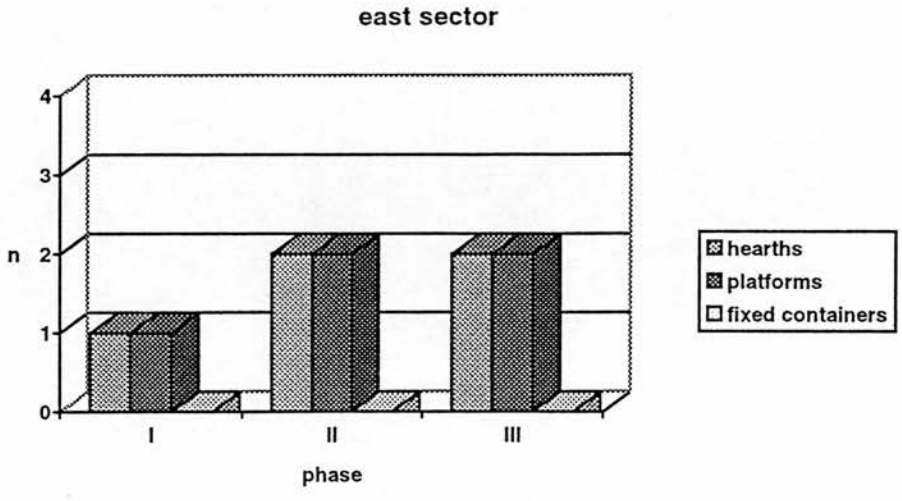


Illustration 50: Khirokitia (Le Brun): Number of types of features (hearths, platforms, fixed containers) per unit, in each phase and sector.



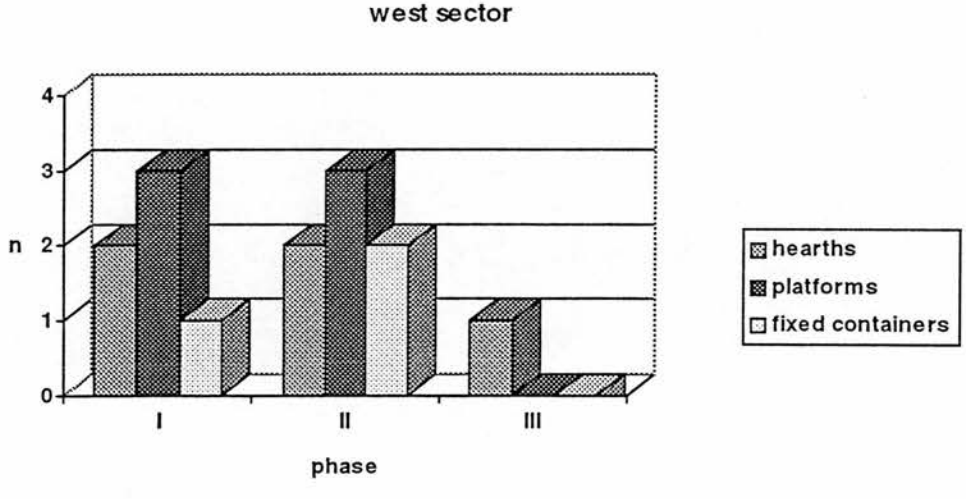
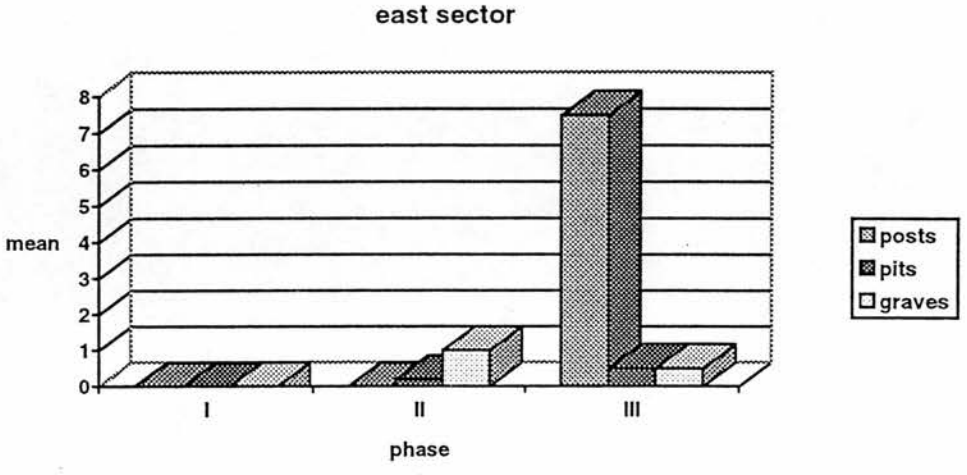


Illustration 51: Khirokitia (Dikaios): Average number of posts, pits and graves per unit, in each phase and sector.



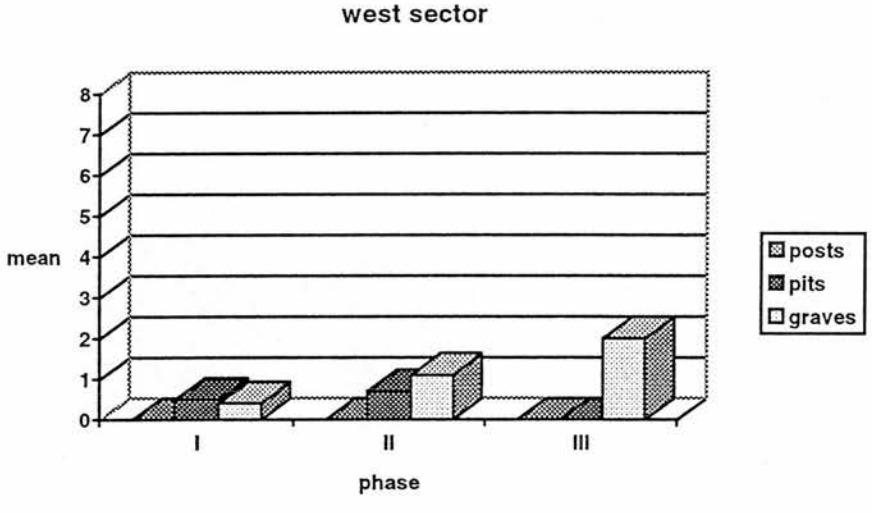
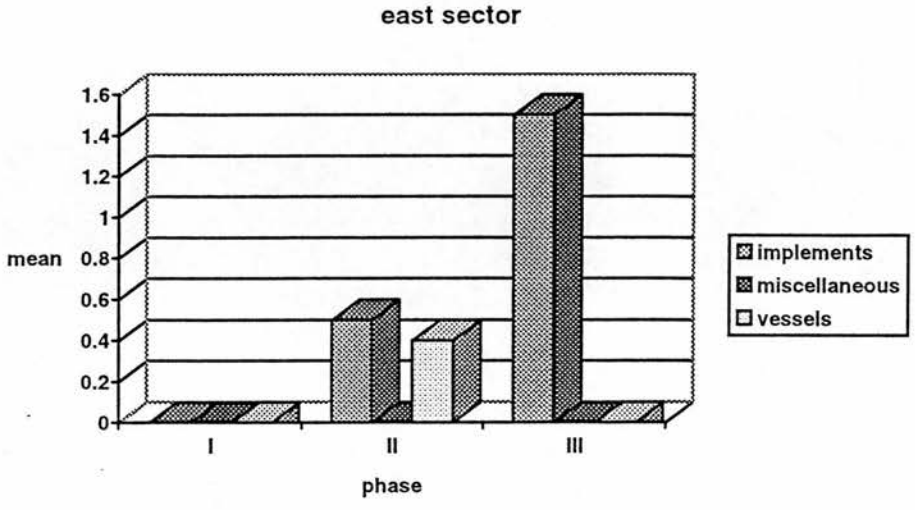


Illustration 52: Khirokitia (Dikaios): Average number of finds (implements, miscellaneous, vessels) per unit, in each phase and sector.



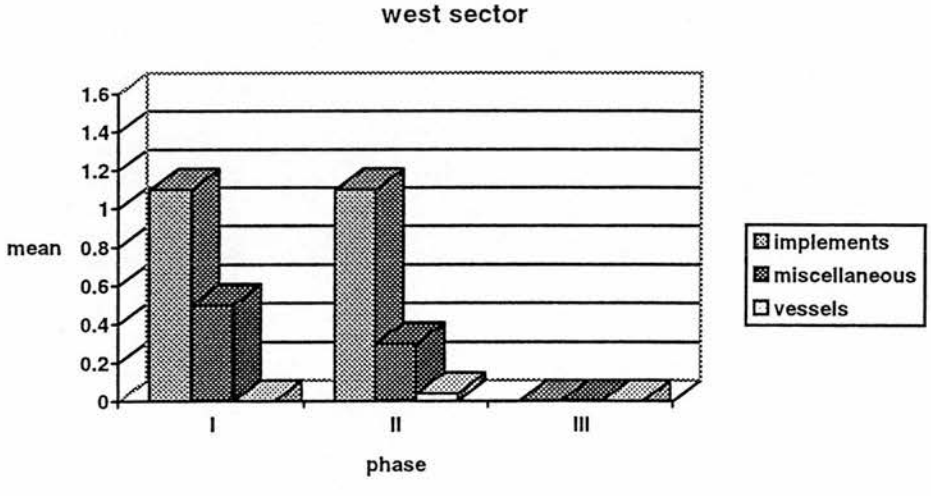
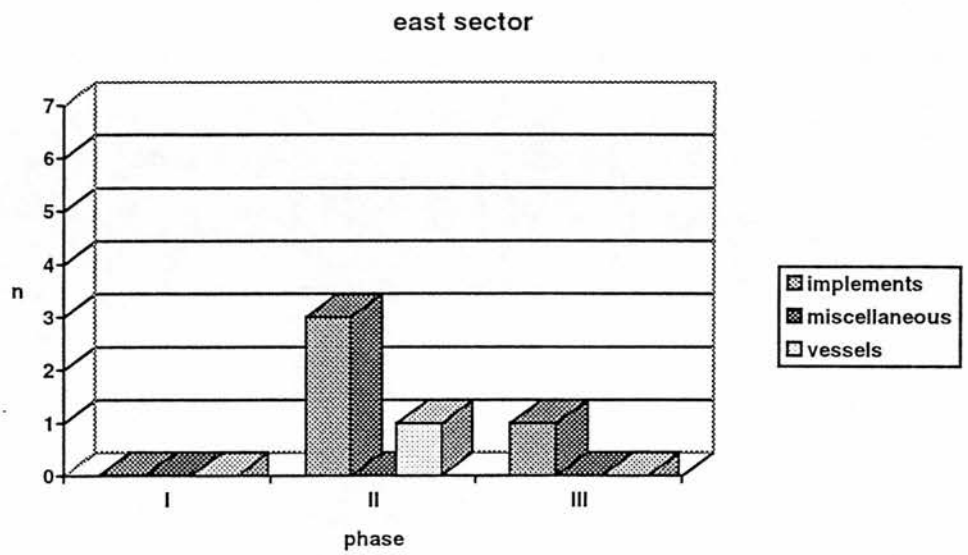


Illustration 53: Khirokitia (Dikaios): Number of types of finds (implements, miscellaneous, vessels) in each phase and sector.



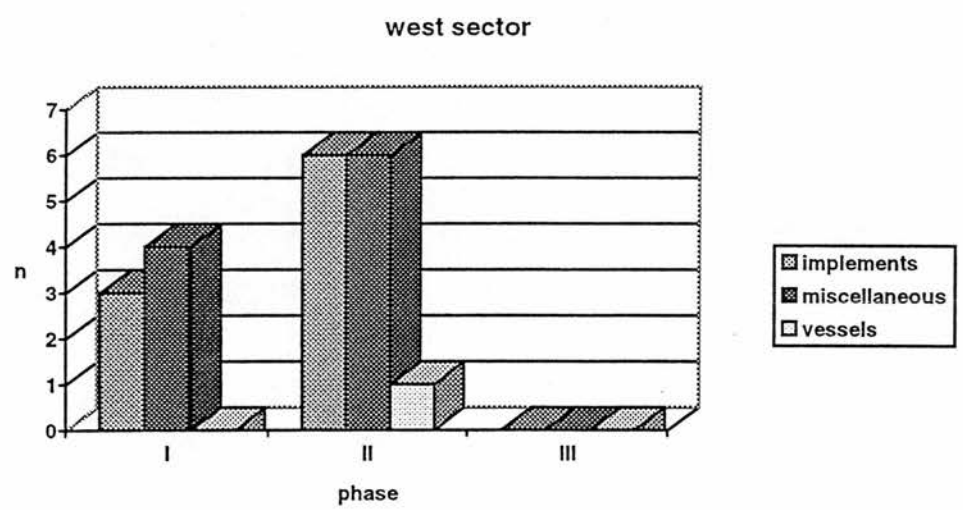


Illustration 54: Khirokitia (Dikaios): Average number of 'other/unspecified finds' per unit, in each phase and sector.

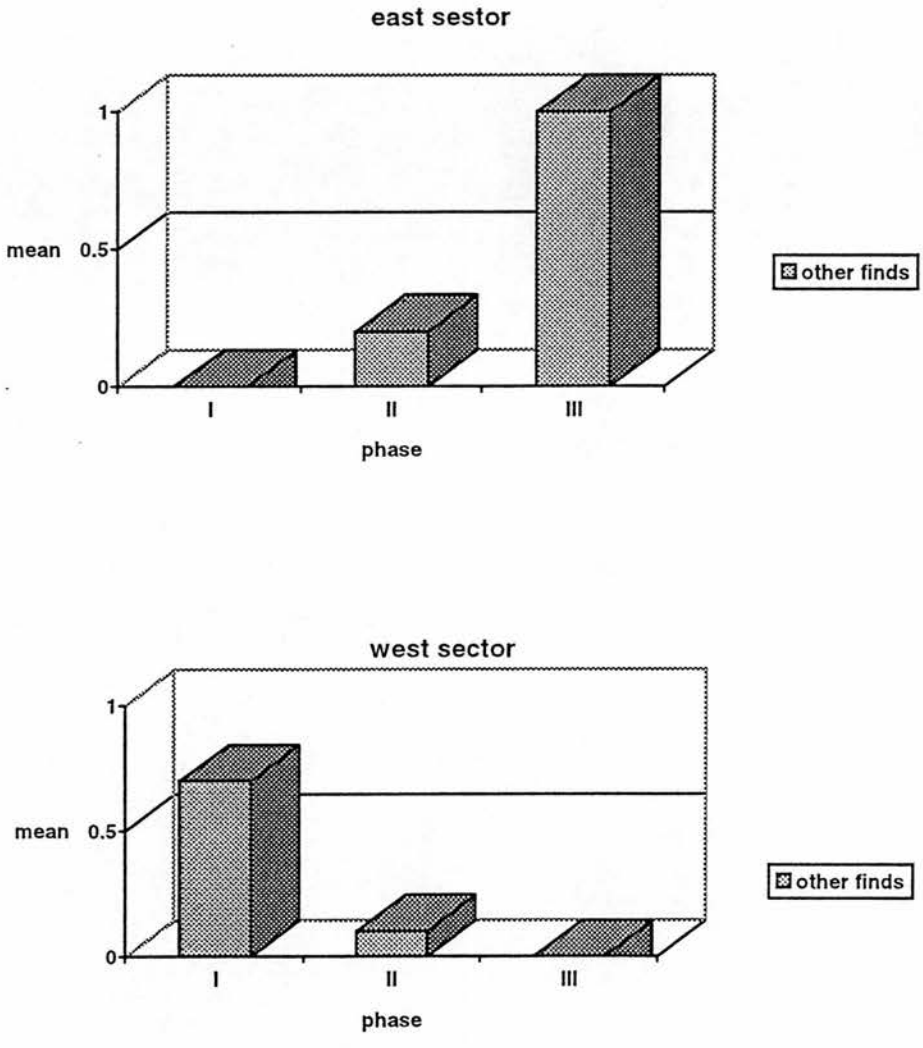
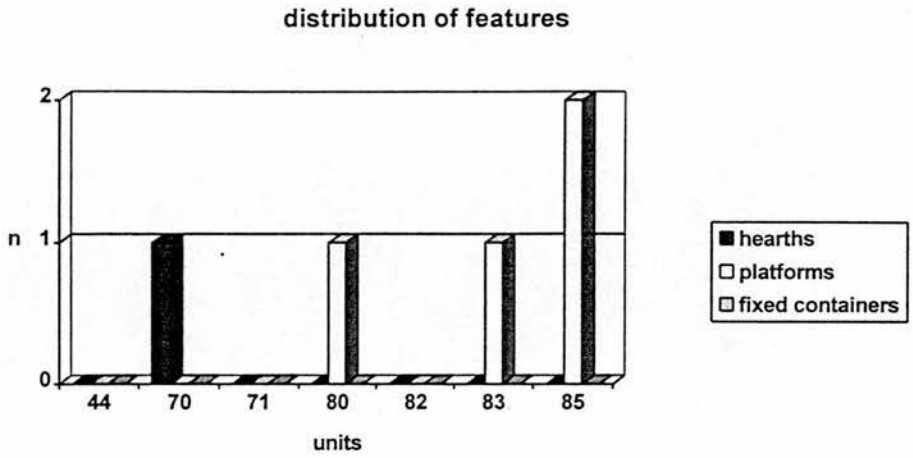
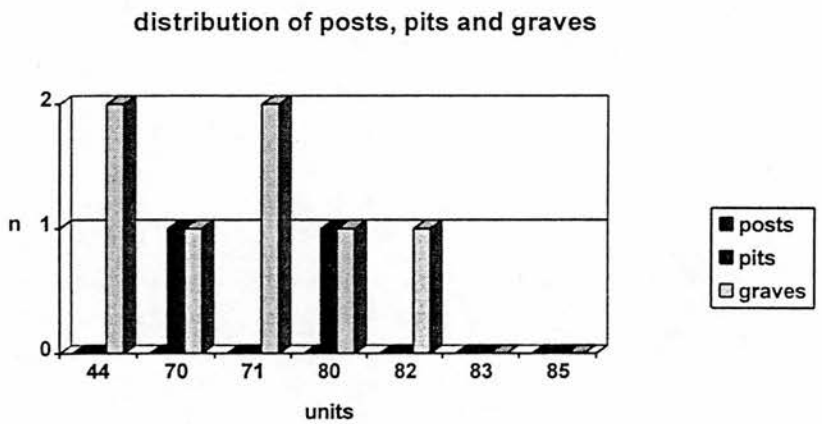


Illustration 55: Khirokitia (Dikaios): East sector, phase II: Distribution of features.

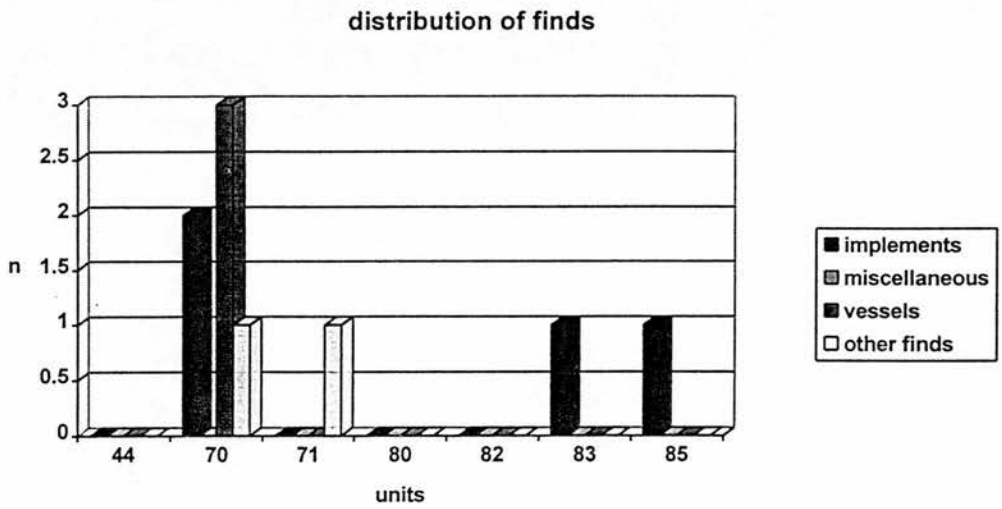




building	VIII(II)	XXII (II)		XXVI	XXVII (II)		XXIX (II)
units	44	70	71	80	82	83	85
size in m^2	5.00	6.50	11.00	6.10	3.70	3.70	3.60
type of segmentation	A	Ba	Ba	Bc	A'/Ca	A'	A'

Note: types of segmentation: A: no partition, A': no partition but adjacent to another structure, Ba: partition wall, Bc: partition wall forming an enclosed area, Ca: pillar / buttress.

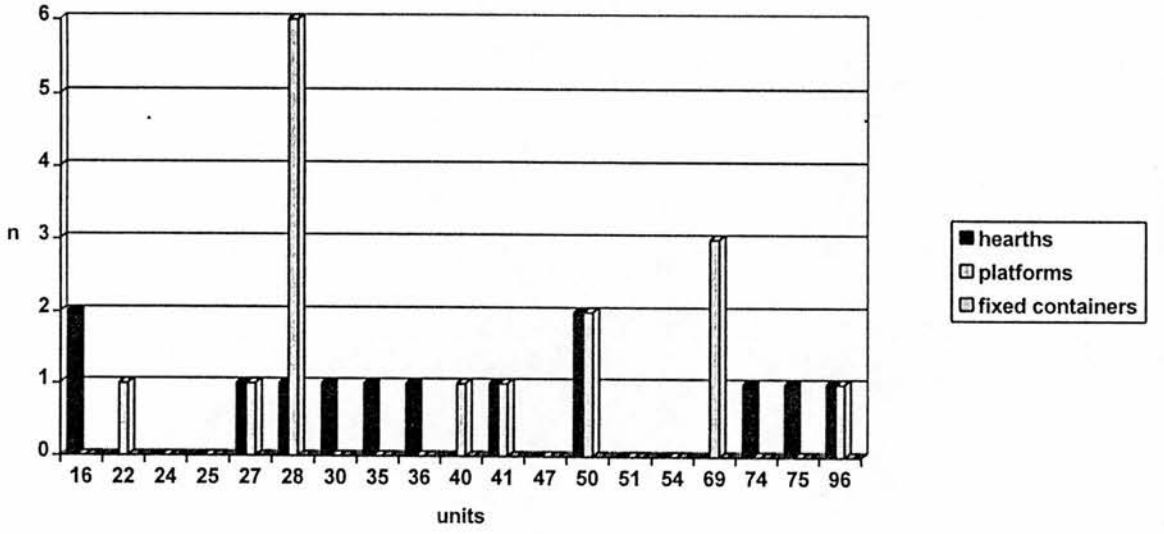
Illustration 56: Khirokitia (Dikaios): East sector, phase II: Distribution of finds.



building	VIII(II)	XXII (II)		XXVI	XXVII (II)		XXIX (II)
units	44	70	71	80	82	83	85
size in m^2	5.00	6.50	11.00	6.10	3.70	3.70	3.60
type of segmentation	A	Ba	Ba	Bc	A'/Ca	A'	A'

Note: types of segmentation: A: no partition, A': no partition but adjacent to another structure, Ba: partition wall, Bc: partition wall forming an enclosed area, Ca: pillar / buttress

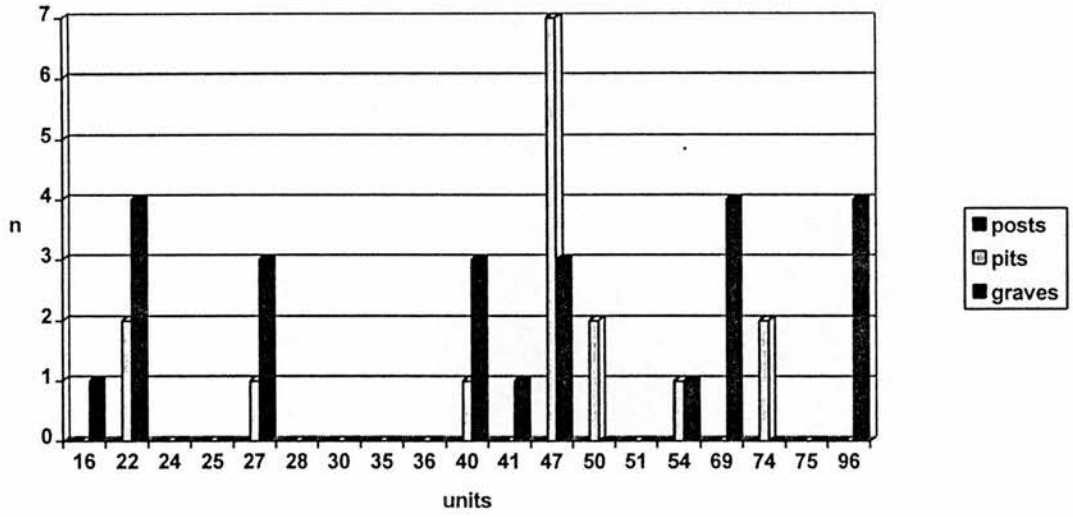
Illustration 57: Khirokitia (Dikaios): West sector, phase II: Distribution of features.



building	BIA (II)	BXII A (II)	BIII (I)					BV				BX (III)	BXV (II)			BXX (I)	BXXIV (I)		BXL VII
units	16	22	24	25	27	28	30	35	36	40	41	47	50	51	54	69	74	75	96
size in m^2	30.40	9.00	4.50	4.50	4.50	4.50	1.80	5.40	5.40	5.80	5.80	6.80	4.00	4.00	4.00	17.20	6.10	6.10	8.60
type of segmentation	Ca	A	A	A	Bc	A	A	Bc	A	Ba	A	A	A'	A'	A'	Ca	Ca	Ca/Ba	Ca/Ba

Note: types of segmentation: A: no partition, A': no partition but adjacent to another structure, Ba: partition wall, Bc: partition wall forming enclosed area, Ca: pillar/buttress.

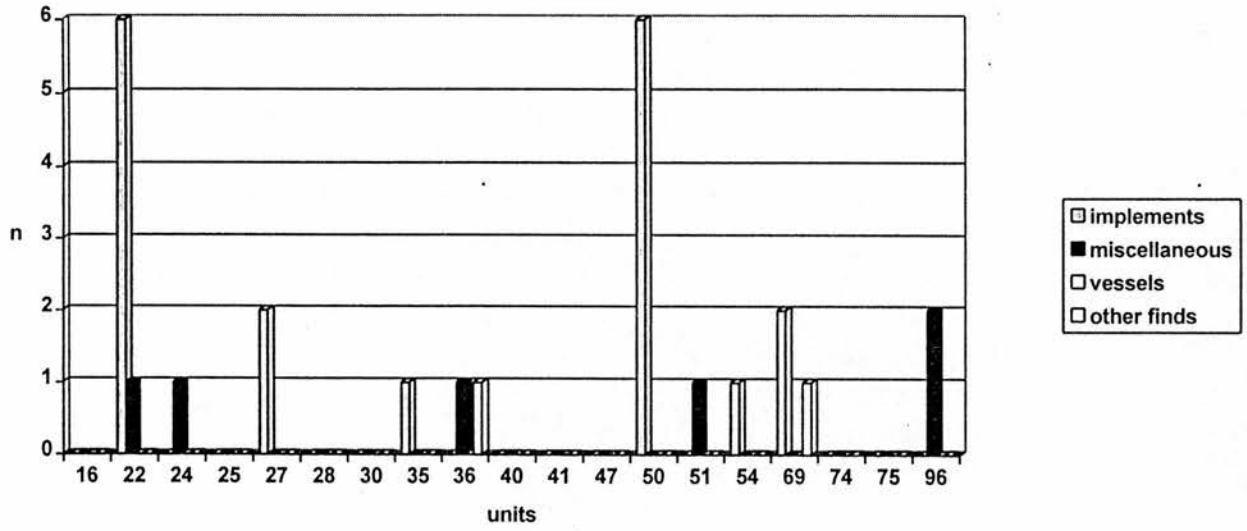
Illustration 58: Khirokitia (Dikaios): West sector, phase II: Distribution of posts, pits and graves.



building	BIA (II)	BXII A (II)	BIII (I)					BV				BX (III)	BXV (II)			BXX (I)	BXXIV (I)		BXL VII
units	16	22	24	25	27	28	30	35	36	40	41	47	50	51	54	69	74	75	96
size in m^2	30.40	9.00	4.50	4.50	4.50	4.50	1.80	5.40	5.40	5.80	5.80	6.80	4.00	4.00	4.00	17.20	6.10	6.10	8.60
type of segmentation	Ca	A	A	A	Bc	A	A	Bc	A	Ba	A	A	A'	A'	A'	Ca	Ca	Ca/Ba	Ca/Ba

Note: types of segmentation: A: no partition, A': no partition but adjacent to another structure, Ba: partition wall, Bc: partition wall forming enclosed area, Ca: pillar/buttress.

Illustration 59: Khirokitia (Dikaios): West sector, phase II: Distribution of finds.



building	BIA (II)	BXII A (II)	BIII (I)					BV				BX (III)	BXV (II)			BXX (I)	BXXIV (I)		BXL VII
units	16	22	24	25	27	28	30	35	36	40	41	47	50	51	54	69	74	75	96
size in m^2	30.40	9.00	4.50	4.50	4.50	4.50	1.80	5.40	5.40	5.80	5.80	6.80	4.00	4.00	4.00	17.20	6.10	6.10	8.60
type of segmentation	Ca	A	A	A	Bc	A	A	Bc	A	Ba	A	A	A'	A'	A'	Ca	Ca	Ca/Ba	Ca/Ba

Note: types of segmentation: A: no partition, A': no partition but adjacent to another structure, Ba: partition wall, Bc: partition wall forming enclosed area, Ca: pillar/buttress.

Illustration 60: Sotira (Dikaios): Distribution of units in the site.

Buildings	*Phase I*	*Phase II*	*Phase III*	*Phase IV*
B36	[1 2			
B37	[3'			
B29	[4 C C			
B38	[5 6			
B39	[7' 8			
B40	[9			
B1		[* 10 11' 12'		51'
B1A		? C 13'		
B6		(? C) 14		52
B3		[15 16		53'
B5		[17 18		54'
B7		[19 20		C
B9		[21' 22'		
B13A		[* C		
B(17)		[23		
B2			[24	55'
B4			[25 C	
B34			([*) C C	
B8			[26	56
B8A			([*) 27' C	
B10			[28	57'
B11			[29	58'
B12			[30	59'
B16			? * 31	60'
B13			32	61'
B14			(B37) 33	62
B15			? 34' C	
B17			(B(17)) 35	63'
B18			[36	C
B19			[37 38'	
B20			([*) 39	64'
B21			[40	65'
B22			[41'	C
B23			[* C	
B35			? C C	
B24			[42	C
B25			([*) 43	66
B26			? C	
B27			(B40) 44 C	
B28			(B40) C	
B30			[45	67
B31			[46 C	
B31A			(B36) 47 48	
B32			[49 C	
B 33			(? *) 50' C	
B34A			([*) C C	

Note: [: bedrock reached, ? : bedrock not reached
* : traces of occupation(but no traces of wall), C: traces of occupation (too eroded but with structural remains/walls)
numbers: undisturbed units, **numbers with an apostrophe (')** : disturbed units
underlined: units undisturbed and completely excavated and preserved (used in level II of analysis)
in parenthesis: underlying structures

Illustration 61: Sotira (Dikaios): Distribution of units according to the Data Quality Control Factors

phase I

units	excavated/ preserved A	partly excavated/ preserved B	excavated/partly preserved C	partly excavated/ partly preserved D	total
undisturbed ( )	2			5	7
disturbed (')			1	1	2
total	2		1	6	9

phase II

units	excavated/ preserved A	partly excavated/ preserved B	excavated/partly preserved C	partly excavated/ partly preserved D	total
undisturbed ( )	9				9
disturbed (')	2		3		5
total	11		3		14

phase III

units	excavated/ preserved A	partly excavated/ preserved B	excavated/partly preserved C	partly excavated/ partly preserved D	total
undisturbed ( )	11		5	5	21
disturbed (')	2		3	1	6
total	13		8	6	27

phase IV

units	excavated/ preserved A	partly excavated/ preserved B	excavated/partly preserved C	partly excavated/ partly preserved D	total
undisturbed ( )	3		1	1	5
disturbed (')	6		5	1	12
total	9		6	2	17

Illustration 62: Sotira (Dikaios): General characteristics of size and segmentation types in each phase.

	phase I	*phase II*	*phase III*	*phase IV*
buildings excavated	6	10	37	21
no. of buildings	6	8	25	17
no. of units/floors	9	14	27	17
size of buildings (m^2)	>4.60 - 12.00?	7.50 - 27.60	4.90 - 29.30	5.80 - 29.30
types of segmentation	A' , Bc/A'	A, A', Bc	A, A', Bc Ba/A', Bc/A'	A, A', Bc, Bc/A'

Note: **types of segmentation:** A: no partitions, A' : no partitions but adjacent to other structures
Ba: partition wall, Bc: partition wall forming an enclosed area [see app. I, V:8]

Illustration 63: Sotira (Dikaios) Relation between size and segmentation types in phase I.

		types of structural segmentation					
		A	A'	Ba	Bc	Ba/A'	Bc/A'
buildings	**units**						
B36	**1**						**(8.60)**
	2						**(8.60)**
B37	3'		(12.00?)				
B29	4		>4.60				
B38	5						>8.20
	6		>8.20				
B39	7'		>5.90				
	8		>5.90				
B40	9						>8.20

Note: **unit numbers with an apostrophe:**disturbed units, **unit numbers without an apostrophe**: undisturbed units
size estimation: all in m^2, questionmark (?): indicates approximate estimation (usually due to erosion),
parenthesis: unclear type of segmentation
types of segmentation: A: no partitions, A' : no partitions but adjacent to other structures
Ba: partition wall, Bb: low partition (ridge) Bc: partition wall forming an enclosed area
Ca: pillar/buttress (loft ?) [see app. I, V:8]
underlined units: units / floors used in level II of analysis (undisturbed, completely preserved and excavated)

Illustration 64: Sotira (Dikaios): Relation between size and segmentation types in phase II.

		types of structural segmentation					
		A	A'	Ba	Bc	Ba/A'	Bc/A'
buildings	**units**						
B1	**10**		**(27.60)**				
	11'		(27.60)				
	12'		> 8.00				
B1A	13'		7.50?				
B6	**14**		**11.30**				
B3	**15**	**17.10**					
	16	**17.10**					
B5	**17**				**20.70**		
	18				**20.70**		
B7	**19**	**20.30**					
	20	**20.30**					
B9	21'	(24.00?)					
	22'	(24.00?)					
B(17)	**23**		**7.50**				

Note: **unit numbers with an apostrophe:**disturbed units, **unit numbers without an apostrophe**: undisturbed units
size estimation: all in m^2, questionmark (?): indicates approximate estimation (usually due to erosion),
parenthesis: unclear type of segmentation
types of segmentation: A: no partitions, A' : no partitions but adjacent to other structures
Ba: partition wall, Bb: low partition (ridge),Bc: partition wall forming an enclosed area
Ca: pillar/buttress (loft ?) [see app. I, V:8]
underlined units: units / floors used in level II of analysis (undisturbed, completely preserved and excavated)

Illustration 65: Sotira (Dikaios): Relation between size and segmentation types in phase III.

		types of structural segmentation					
		A	A'	Ba	Bc	Ba/A'	Bc/A'
buildings	**units**						
B2	**24**				**9.10**		
B4	25'		19.20?				
B8	26						16.90?
B8A	27'		9.90				
B10	28		(27.30?)				
B11	**29**						**(15.30)**
B12	**30**						**18.00**
B16	**31**		**12.30**				
B13	32				29.30?		
B14	**33**		**(14.30)**				
B15	34'		4.90				
B17	**35**		**7.50**				
B18	36				19.80?		
B19	37		(21.50?)				
	38'		(21.50?)				
B20	39		(16.50?)				
B21	40	9.70					
B22	41'		21.50?				
B24	**42**	**7.10**					
B25	43		(>12.10)				
B27	44		(>5.20)				
B30	**45**		**5.80**				
B31	**46**					**7.40**	
B31A	**47**		**10.70**				
	48		**10.70**				
B32	49		13.70?				
B33	50'		5.80				

Note: **unit numbers with an apostrophe:**disturbed units, **unit numbers without an apostrophe**: undisturbed units
size estimation: all in m^2, questionmark (?): indicates approximate estimation (usually due to erosion),
parenthesis: unclear type of segmentation
types of segmentation: A: no partitions, A' : no partitions but adjacent to other structures
Ba: partition wall, Bb: low partition (ridge) Bc: partition wall forming an enclosed area
Ca: pillar/buttress (loft ?) [see app. I, V:8]
underlined units: units / floors used in level II of analysis (undisturbed, completely preserved and excavated)

Illustration 66: Sotira (Dikaios) : Relation between size and segmentation types in phase IV.

		types of structural segmentation					
		A	A'	Ba	Bc	Ba/A'	Bc/A'
buildings	**units**						
B1A	51'	27.60					
B6	**52**		**11.30**				
B3	53'	17.11					
B5	54'	20.70					
B17	63'		7.50				
B2	55'				9.10		
B8	56		16.90?				
B10	57'		27.30?				
B11	58'		15.30				
B12	59'						18.00
B16	60'		12.30				
B13	61'	29.30?					
B14	**62**		**14.30**				
B20	64'		16.50?				
B21	65'	9.70					
B25	66		>12.10				
B30	**67**		**5.80**				

Note: **unit numbers with an apostrophe:**disturbed units, **unit numbers without an apostrophe**: undisturbed units
size estimation: all in m^2, questionmark (?): indicates approximate estimation (usually due to erosion),
parenthesis: unclear type of segmentation
types of segmentation: A: no partitions, A' : no partitions but adjacent to other structures
Ba: partition wall, Bb: low partition (ridge) Bc: partition wall forming an enclosed area
Ca: pillar/buttress (loft ?) [see app. I, V:8]
underlined units: units / floors used in level II of analysis (undisturbed, completely preserved and excavated)

Illustration 67: Sotira (Dikaios): Average number of features per unit in each phase, and number of types of features per phase.

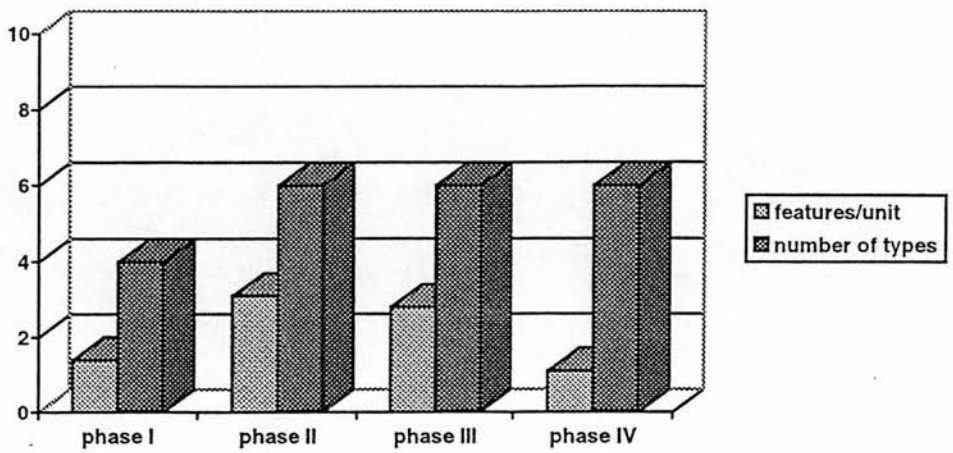


Illustration 68: Sotira (Dikaios): Average number of posts and pits per phase.

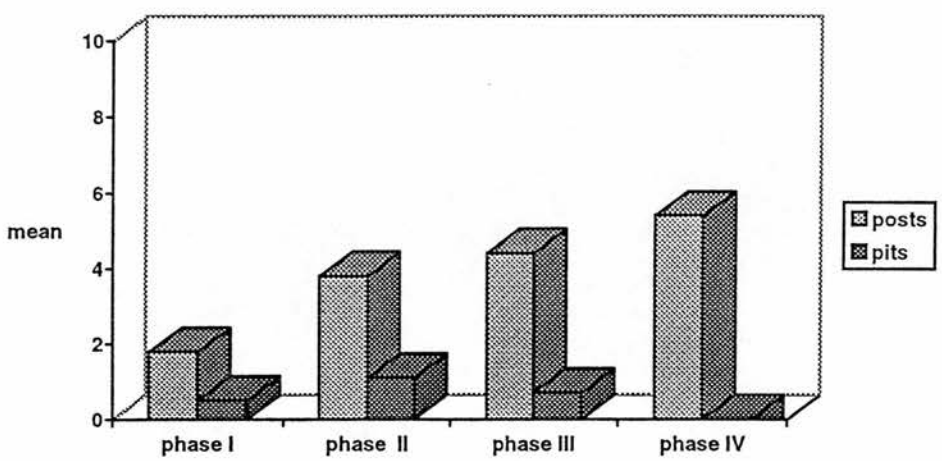


Illustration 69: Sotira (Dikaios): Average number of features (hearths, platforms, fixed containers) per phase.

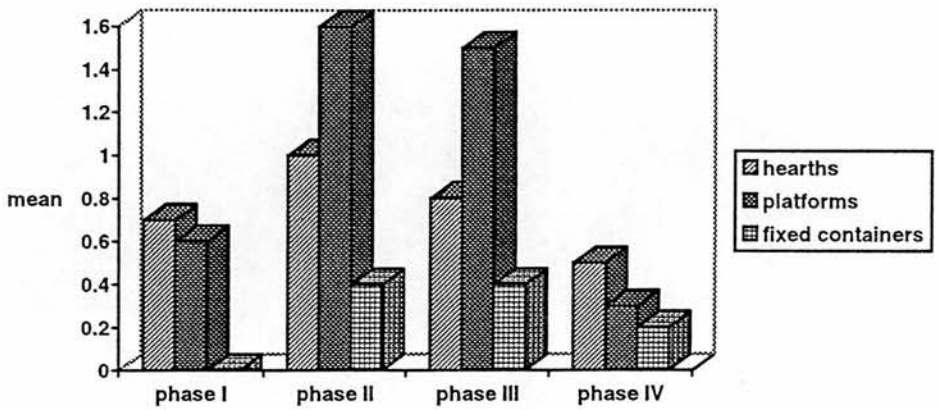


Illustration 70: Sotira (Dikaios): Number of types of features (hearths, platforms and fixed containers) per phase.

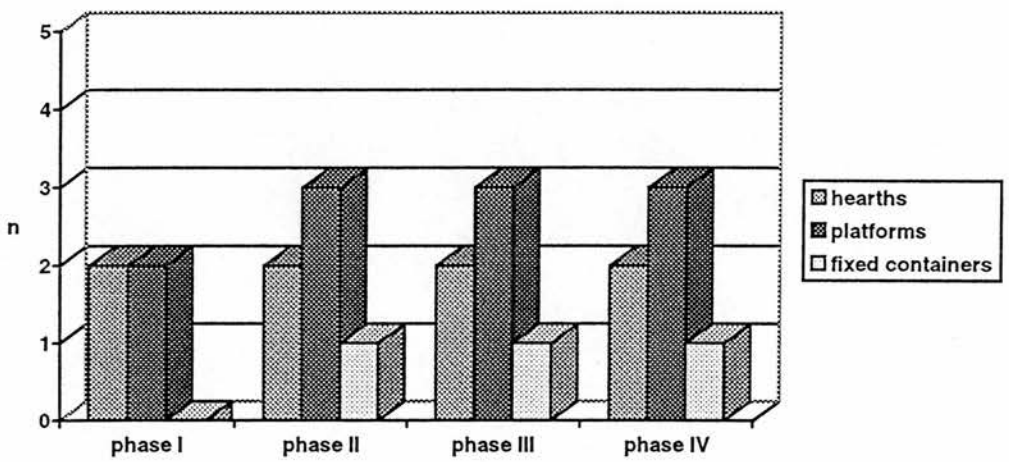


Illustration 71: Sotira (Dikaios): Average number of finds (implements, miscellaneous and vessels) per phase.

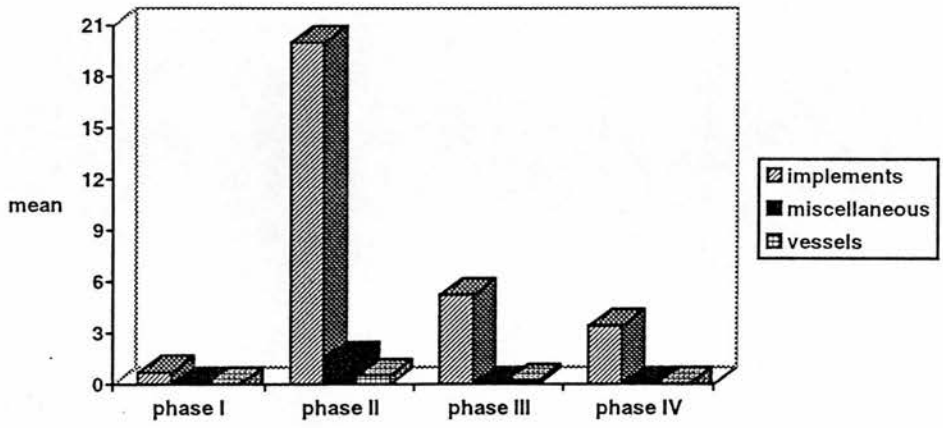


Illustration 72: Sotira (Dikaios): Number of types of finds (implements, miscellaneous, vessels) per phase.

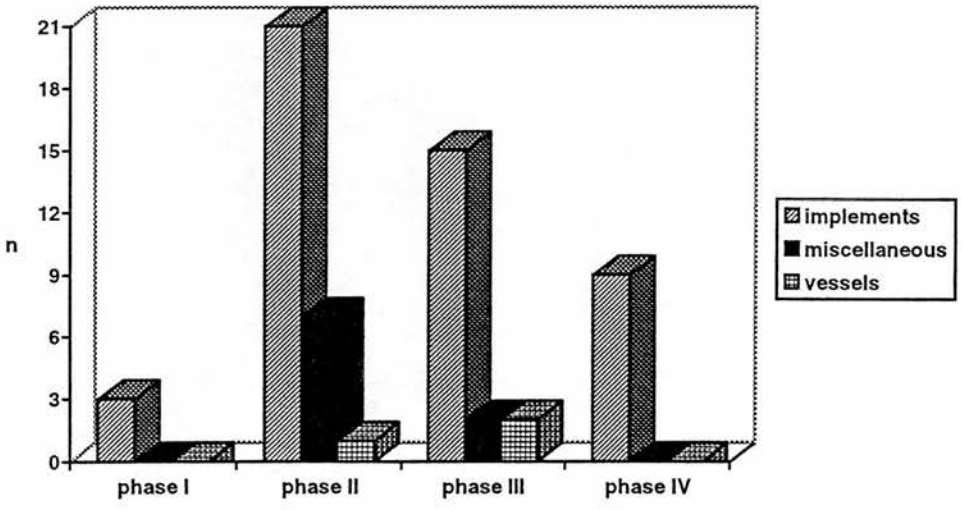


Illustration 73: Sotira (Dikaios): Average number of 'other/unspecified objects' per unit in each phase.

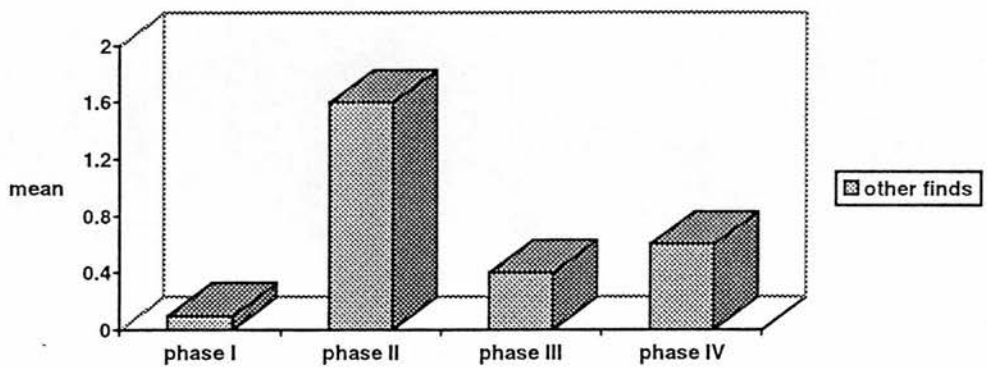


Illustration 74: Sotira (Dikaios): Average number of sherds per unit in each phase.

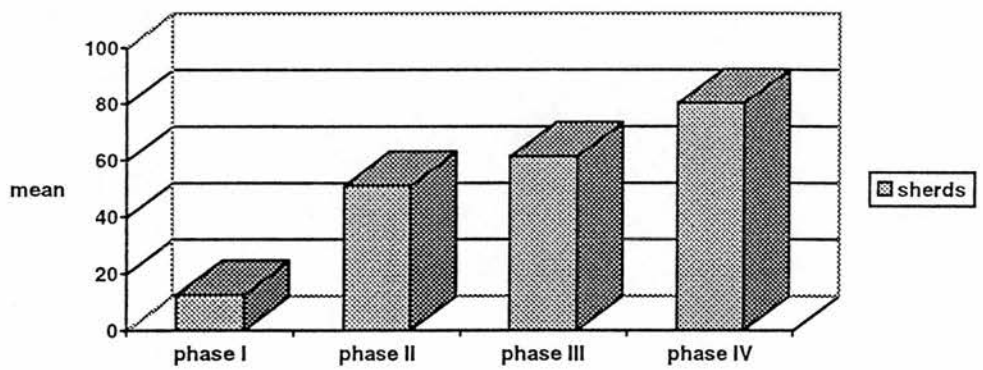
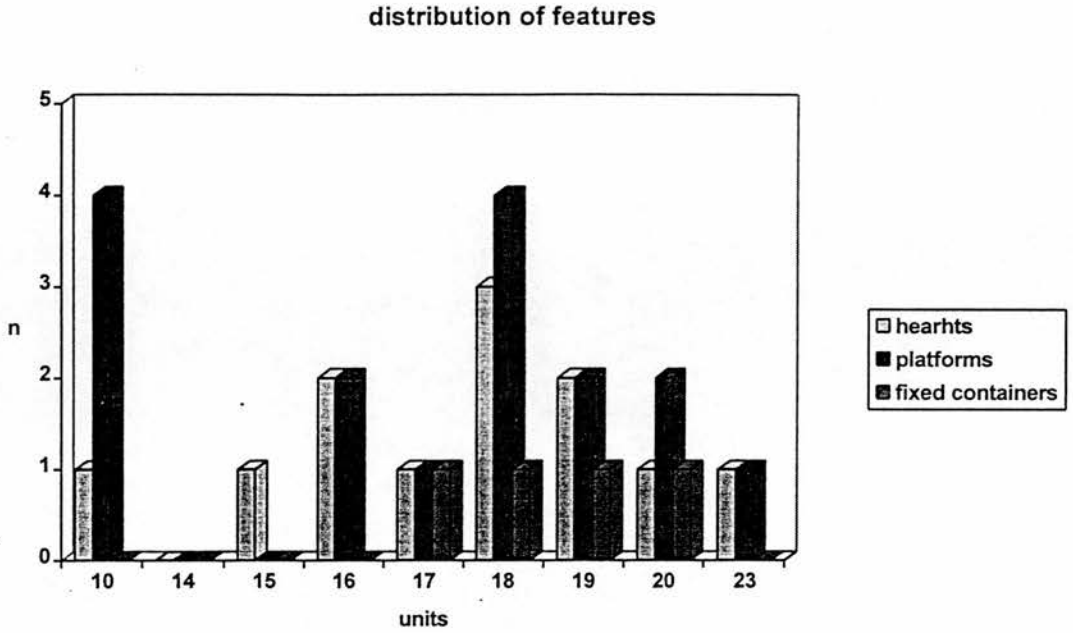
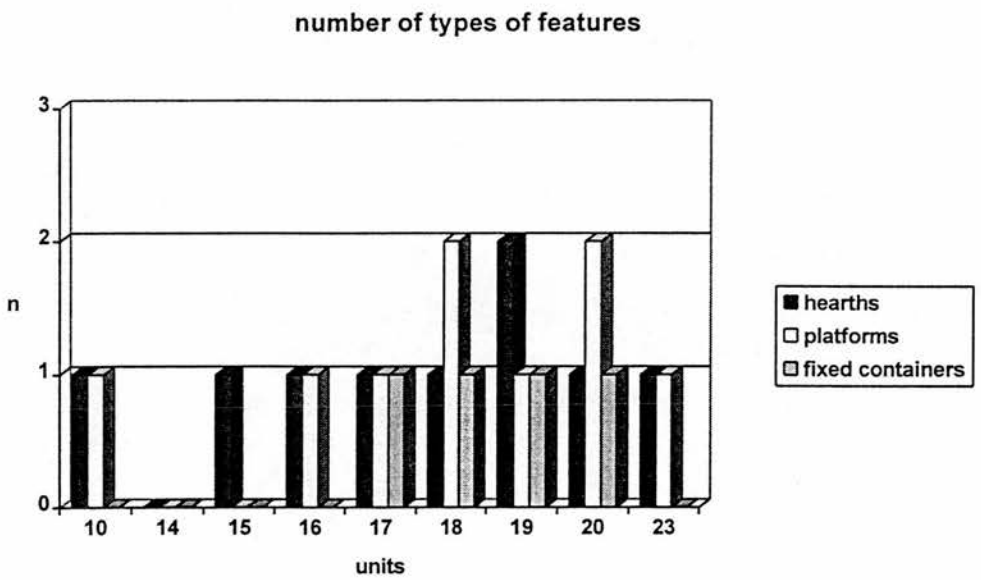


Illustration 75: Sotira (Dikaios): Phase II: Distribution of features and their types.

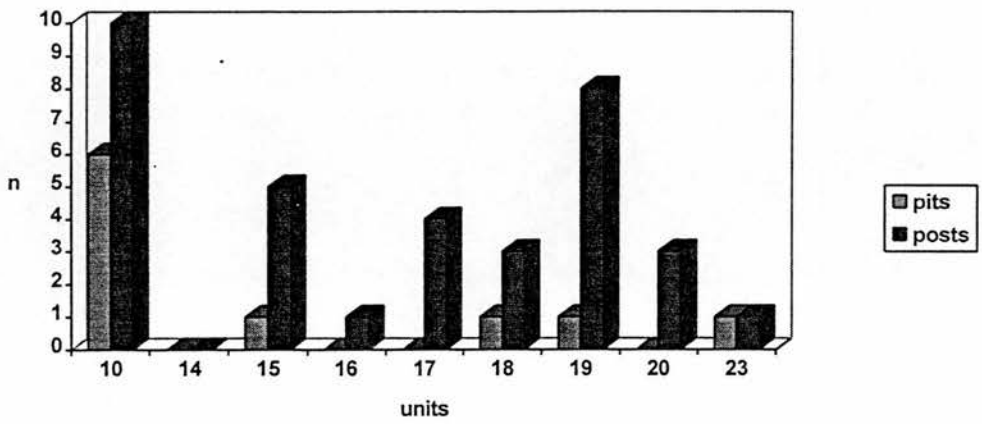




building	B1	B6	B3		B5		B7		B(17)
units	10	14	15	16	17	18	19	20	23
size in m^2	27.60	11.30	17.10	17.10	20.70	20.70	20.30	20.30	7.50
type of segmentation	A'	A'	A	A	Bc	Bc	A	A	A'

Note: types of segmentation: A: no partition, A': no partition but adjacent to other units, Bc: partition wall forming an enclosed area.

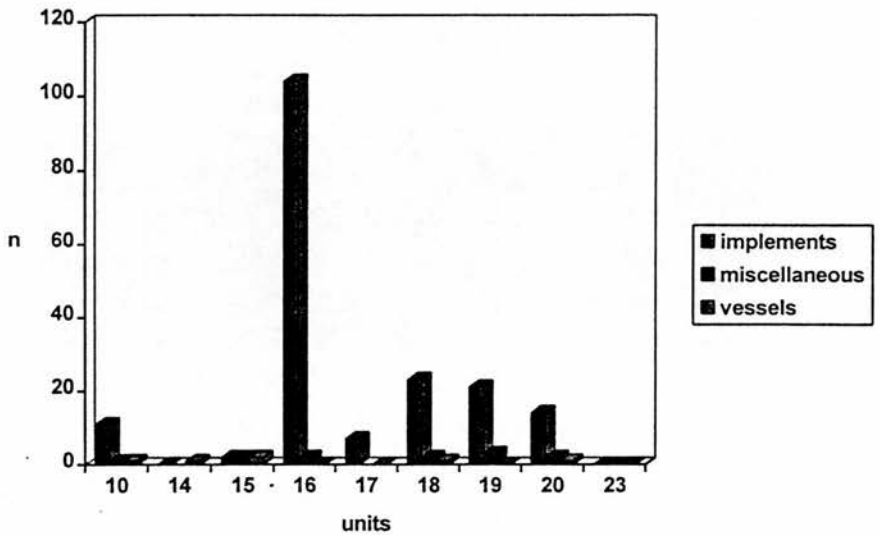
Illustration 76: Sotira (Dikaios): Phase II: Distribution of posts and pits.



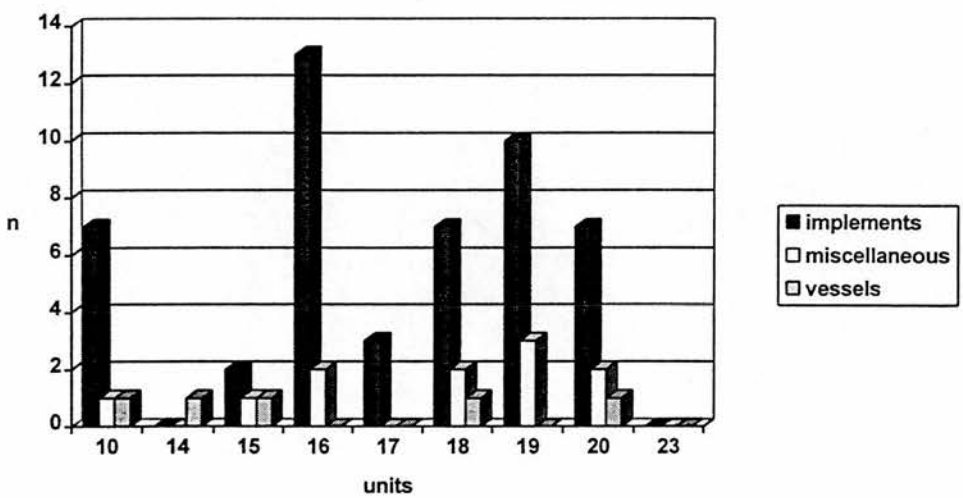
building	B1	B6	B3		B5		B7		B(17)
units	10	14	15	16	17	18	19	20	23
size in m^2	27.60	11.30	17.10	17.10	20.70	20.70	20.30	20.30	7.50
type of segmentation	A'	A'	A	A	Bc	Bc	A	A	A'

Note: types of segmentation; A: no partition, A': no partition but adjacent to other units, Bc: partition wall forming an enclosed area.

Illustration 77: Sotira (Dikaios): Phase II: Distribution of finds and their types.



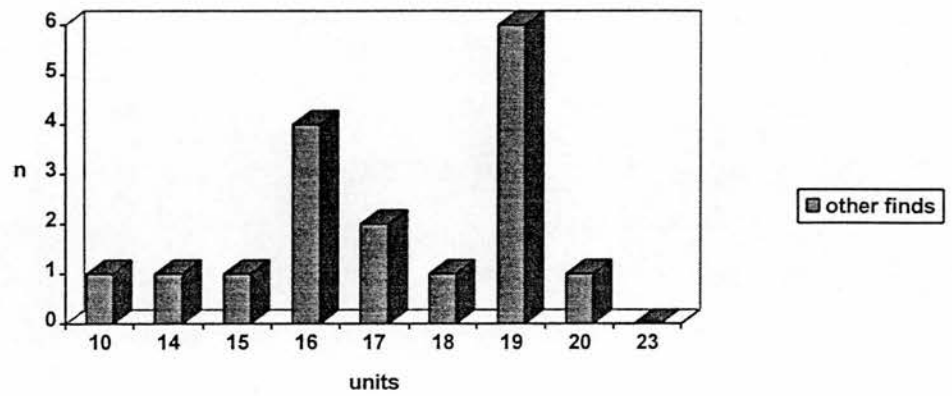
types of finds

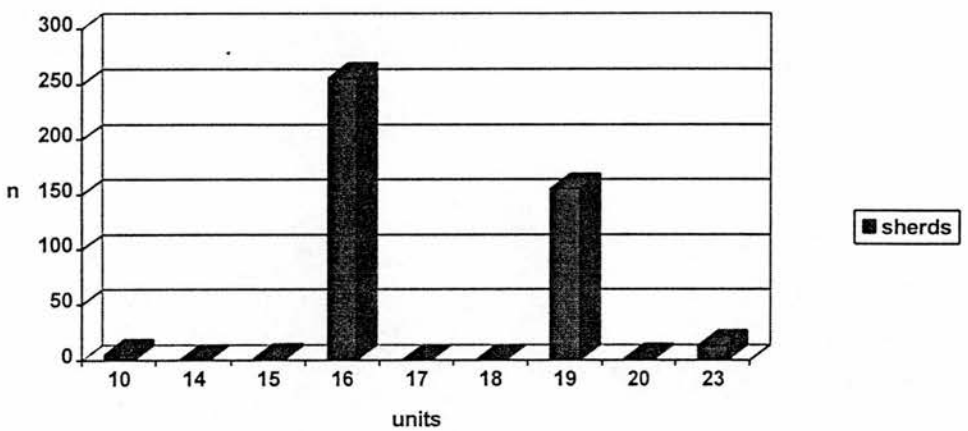


building	B1	B6	B3		B5		B7		B(17)
units	10	14	15	16	17	18	19	20	23
size in m^2	27.60	11.30	17.10	17.10	20.70	20.70	20.30	20.30	7.50
type of segmentation	A'	A'	A	A	Bc	Bc	A	A	A'

Note: types of segmentation; A: no partition, A': no partition but adjacent to other units, Bc: partition wall forming an enclosed area.

Illustration 78: Sotira (Dikaios): Phase II: Distribution of other/unspecified objects and sherds.

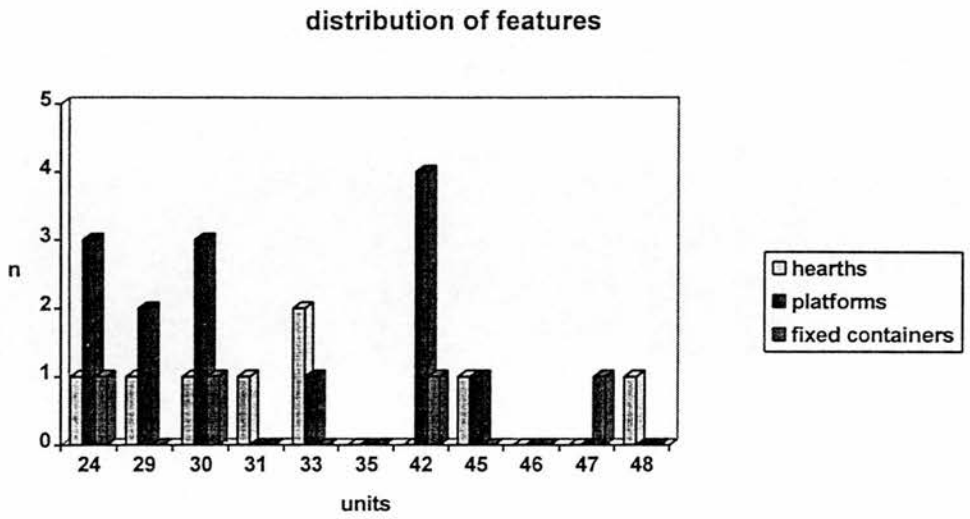


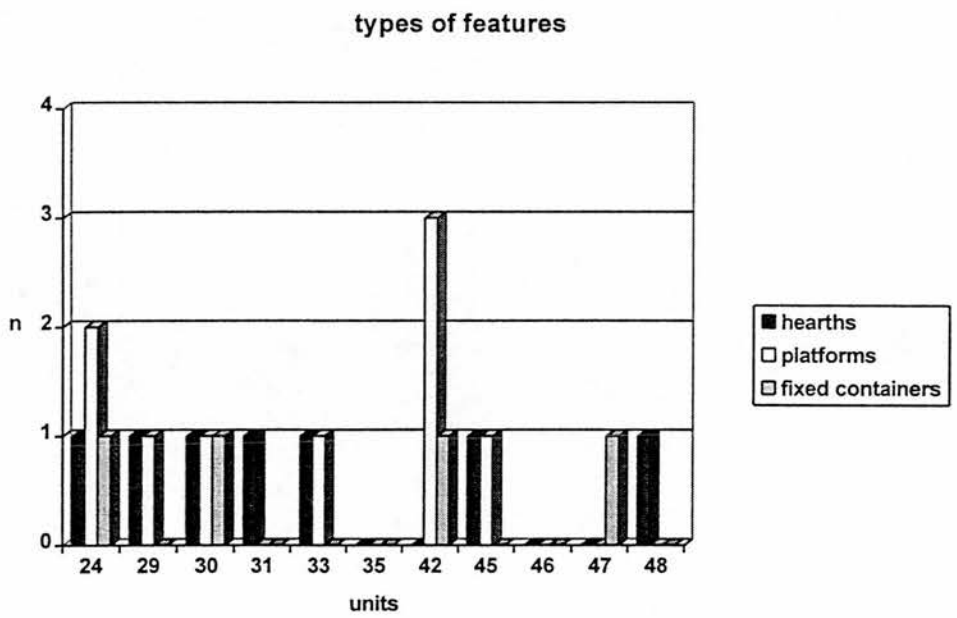


building	B1	B6	B3		B5		B7		B(17)
units	10	14	15	16	17	18	19	20	23
size in m^2	27.60	11.30	17.10	17.10	20.70	20.70	20.30	20.30	7.50
type of segmentation	A'	A'	A	A	Bc	Bc	A	A	A'

Note: types of segmentation; A: no partition, A': no partition but adjacent to other units, Bc: partition wall forming an enclosed area.

Illustration 79: Sotira (Dikaios): Phase III: Disribution of features and their types.

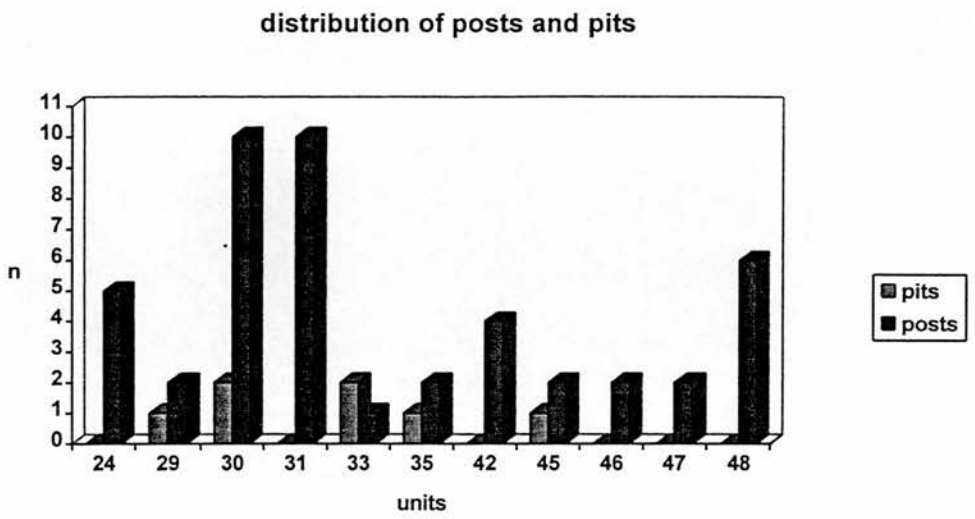




building	B2	B11	B12	B16	B14	B17	B24	B30	B31	B31A	
units	24	29	30	31	33	35	42	45	46	47	48
size in m^2	9.10	15.30	18.00	12.30	14.30	7.50	7.10	5.80	7.40	10.70	10.70
type of segmentation	Bc	Bc/A'	A'	A'	A'	A'	A	A'	Ba/A'	A'	A'

Note: types of segmentation: A: no partition, A': no partition but adjacent to other structures, Ba: partition wall, Bc: partition wall forming an enclosed area.

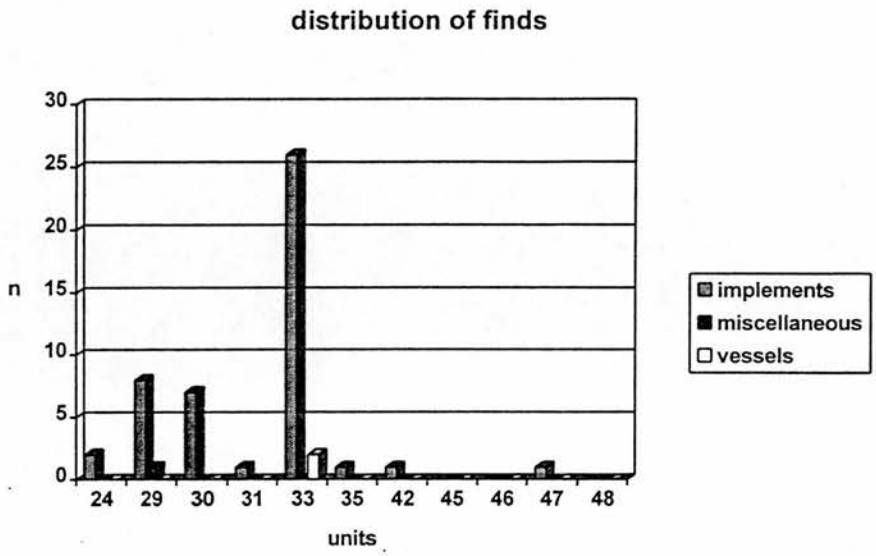
Illustration 80: Sotira (Dikaios): Phase III: Distribution of posts and pits.

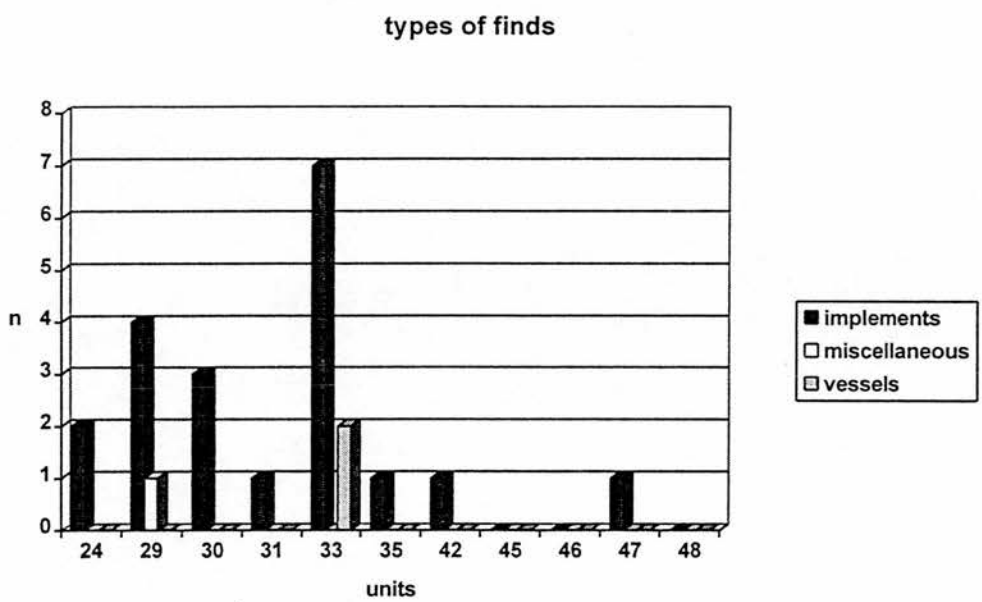


building	B2	B11	B12	B16	B14	B17	B24	B30	B31	B31A	
units	24	29	30	31	33	35	42	45	46	47	48
size in m^2	9.10	15.30	18.00	12.30	14.30	7.50	7.10	5.80	7.40	10.70	10.70
type of segmentation	Bc	Bc/A'	A'	A'	A'	A'	A	A'	Ba/A'	A'	A'

Note: types of segmentation: A: no partition, A': no partition but adjacent to other structures, Ba: partition wall, Bc: partition wall forming an enclosed area.

Illustration 81: Sotira (Dikaïos): Phase III: Distribution of finds and their types.

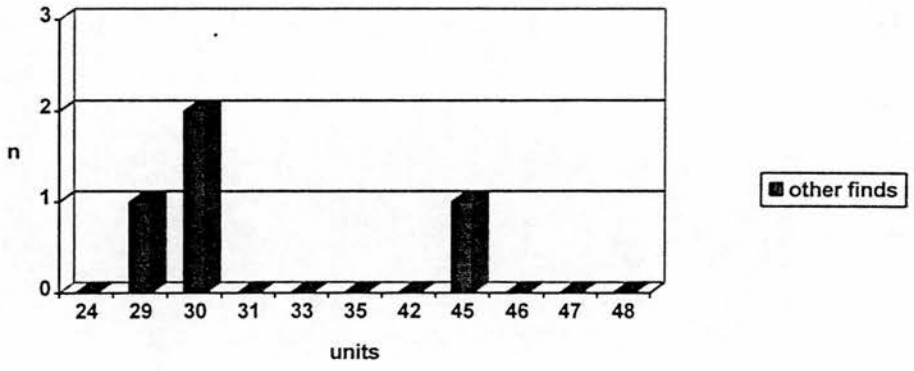


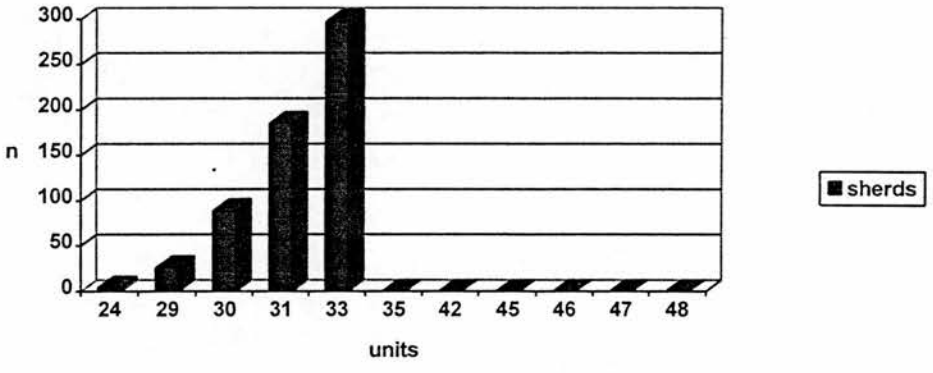


building	B2	B11	B12	B16	B14	B17	B24	B30	B31	B31A	
units	24	29	30	31	33	35	42	45	46	47	48
size in m^2	9.10	15.30	18.00	12.30	14.30	7.50	7.10	5.80	7.40	10.70	10.70
type of segmentation	Bc	Bc/A'	A'	A'	A'	A'	A	A'	Ba/A'	A'	A'

Note: types of segmentation: A: no partition, A': no partition but adjacent to other structures, Ba: partition wall, Bc: partition wall forming an enclosed area.

Illustration 82: Sotira (Dikaios): Phase III: Distribution of other/unspecified objects and sherds.





building	B2	B11	B12	B16	B14	B17	B24	B30	B31	B31A	
units	24	29	30	31	33	35	42	45	46	47	48
size in m^2	9.10	15.30	18.00	12.30	14.30	7.50	7.10	5.80	7.40	10.70	10.70
type of segmentation	Bc	Bc/A'	A'	A'	A'	A'	A	A'	Ba/A'	A'	A'

Note: types of segmentation: A: no partition, A': no partition but adjacent to other structures, Ba: partition wall, Bc: partition wall forming an enclosed area.

Illustration 83: Vrysi (Peltenburg) : Distribution of units in the site.

Buildings	*Early phase*	*Middle phase*	*Late phase*
north sector			
B1	[* 1 2 3	5 6' *	*
B5		? * 7 8	C
B6	? *	9' 10 *	
B7	? * 4 * C	C	
B12	? *	11'	
south sector			
B4A	[* C	* 25'	29 * *
B4B	[* C	26 27'	30
B9	[* C	C C	
B2A		[* 12 13 14 15	C
B2B		? * 16 17' 18 19	28'
B3		[? 20' 21 22 23' 24' C	

Note: [: bedrock reached, **?** : bedrock not reached
* : traces of occupation(but no traces of wall), **C**: traces of occupation (too eroded but with structural remains/walls)
numbers: undisturbed units, **numbers with an apostrophe (')** : disturbed units
underlined: units undisturbed and completely excavated and preserved (used in level II of analysis)

Illustration 84: Vrysi (Peltenburg): General characteristics of size and segmentation types.

	Early phase	*Middle phase*		*Late phase*
	north sector	north	south	south sector
no. of buildings	2	4	5	3
no. of units	4	7	16	3
size of buildings (m^2)	>10.70- 16.00?	12.60-18.00	7.20-22.00	7.20? - 27.00
types of segmentation	A	A, Ba	A',Ba, Ba/A', Bc/A'	A'

Note: Types of segmentation:
A: no partition, A': no partition, but part of a larger unit,
Ba: room with a partitioning wall, Bc: room with a partitioning wall that forms an enclosed area
[see app. I, V:8]

Illustration 85: Vrysi (Peltenburg): Distribution of units according to the Data Quality Control Factors.

Early phase - north sector

units	excavated/ preserved A	partly excavated/ preserved B	excavated/partly preserved C	partly excavated/ partly preserved D	total
undisturbed ( )		3		1	4
disturbed (')					
total		3		1	4

Middle phase - north sector

units	excavated/ preserved A	partly excavated/ preserved B	excavated/partly preserved C	partly excavated/ partly preserved D	total
undisturbed ( )	3		1		4
disturbed (')	1		2		3
total	4		3		7

Middle phase - south sector

units	excavated/ preserved A	partly excavated/ preserved B	excavated/partly preserved C	partly excavated/ partly preserved D	total
undisturbed ( )	7	1	2		10
disturbed (')	5		1		6
total	12	1	3		16

Late phase - south sector

units	excavated/ preserved A	partly excavated/ preserved B	excavated/partly preserved C	partly excavated/ partly preserved D	total
undisturbed ( )	1			1	2
disturbed (')			1		1
total	1		1	1	3

Illustration 86 : Vrysi (Peltenburg): Relation between size and segmentation types in the early phase (north sector).

		types of structural segmentation					
		A	A'	Ba	Bc	Ba/A'	Bc/A'
buildings	**units**						
B1	1	>10.70					
	2	>10.70					
	3	>10.70					
B7	4	16.00?					

Note: **unit numbers with an apostrophe:** disturbed units, **unit numbers without an apostrophe**: undisturbed
size estimation: all in m^2, questionmark (?): indicates approximate estimation (usually due to erosion),
types of segmentation: A: no partitions, A' : no partitions but adjacent to other structures
Ba: partition wall, Bc: partition wall forming an enclosed area [see app. I, V:8]
underlined units: units / floors used in level II of analysis (undisturbed, completely preserved and excavated)

Illustration 87: Vrysi (Peltenburg): Relation between size and segmentation types in the middle phase (north sector).

		types of structural segmentation					
		A	A'	Ba	Bc	Ba/A'	Bc/A'
buildings	**units**						
B1	**5**	**12.60**					
	6'			12.00			
B5	7	**18.00**					
	8	**18.00**					
B6	9	>13.00					
	10	>13.00					
B12	11'			>10.50			

Note: **unit numbers with an apostrophe ('):** disturbed units, **unit numbers without an apostrophe**: undisturbed
size estimation: all in m^2, questionmark (?): indicates approximate estimation (usually due to erosion),
types of segmentation: A: no partitions, A' : no partitions but adjacent to other structures
Ba: partition wall, Bc: partition wall forming an enclosed area [see app. I, V:8]
underlined units: units / floors used in level II of analysis (undisturbed, completely preserved and excavated)

Illustration 88: Vrysi (Peltenburg): Relation between size and segmentation types in the middle phase (south sector).

		types of structural segmentation					
		A	A'	Ba	Bc	Ba/A'	Bc/A'
buildings	**units**						
B2A	12					>13.00	
	13					**13.00**	
	14						**15.60**
	15		15.60				
B2B	**16**						**7.20**
	17'		7.20				
	18		**7.20**				
	19		7.20?				
B3	20'		7.50				
	21		**7.50**				
	22		**7.50**				
	23'		7.50				
	24'		7.50?				
B4A	25'		22.00				
B4B	**26**		**9.00**				
	27'		9.00?				

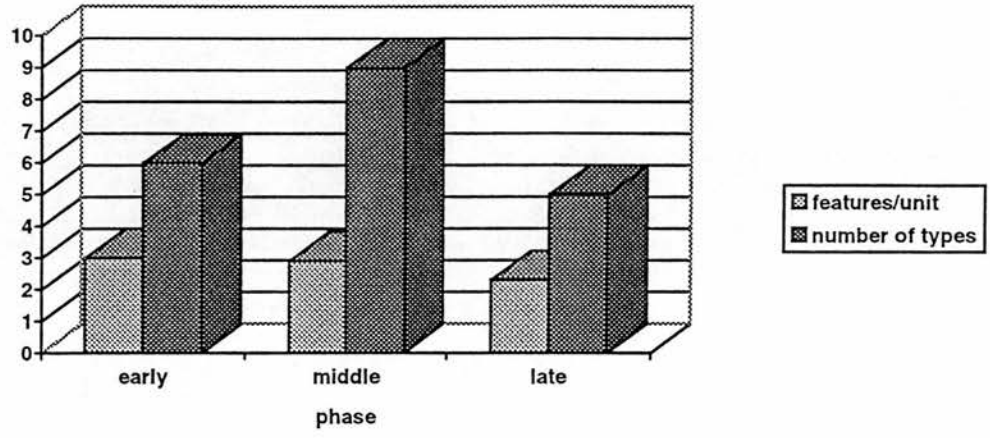
Note: **unit numbers with an apostrophe ('):** disturbed units, **unit numbers without an apostrophe**: undisturbed
size estimation: all in m^2, questionmark (?): indicates approximate estimation (usually due to erosion),
types of segmentation: A: no partitions, A' : no partitions but adjacent to other structures
Ba: partition wall, Bc: partition wall forming an enclosed area [see app. I, V:8]
underlined units: units / floors used in level II of analysis (undisturbed, completely preserved and excavated)

Illustration 89: Vrysi (Peltenburg): Relation between size and segmentation types in the late phase (south sector).

		types of structural segmentation					
		A	A'	Ba	Bc	Ba/A'	Bc/A'
buildings	**units**						
B2A	28'		7.20?				
B2B	29		27.00				
B4B	**30**		**25.00**				

Note: **unit numbers with an apostrophe ('):** disturbed units, **unit numbers without an apostrophe**: undisturbed
size estimation: all in m^2, questionmark (?): indicates approximate estimation (usually due to erosion),
types of segmentation: A: no partitions, A' : no partitions but adjacent to other structures
Ba: partition wall, Bc: partition wall forming an enclosed area [see app. I, V:8]
underlined units: units / floors used in level II of analysis (undisturbed, completely preserved and excavated)

Illustration 90: Vrysi (Peltenburg): Average number of features per unit in each phase and sector and number of types of features per phase and sector.



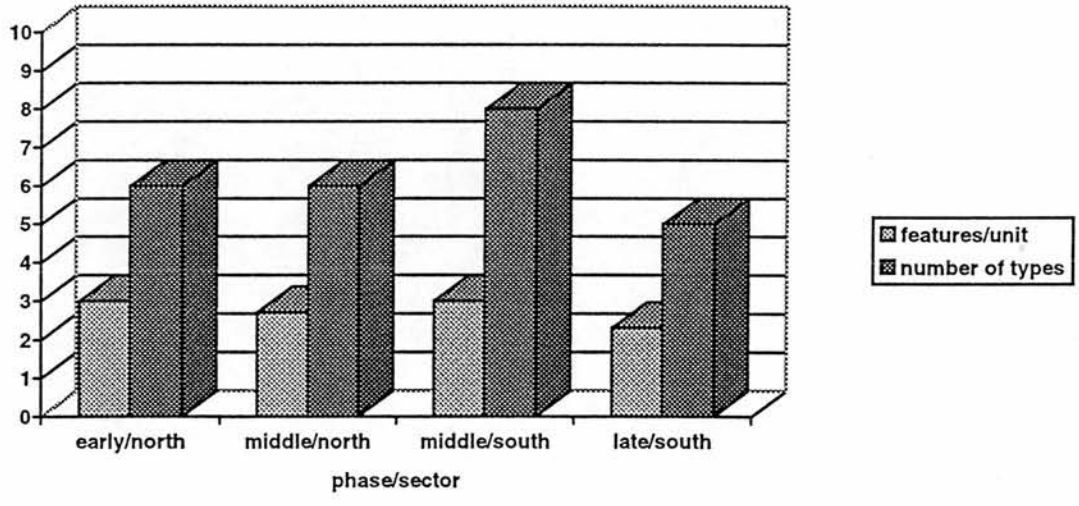
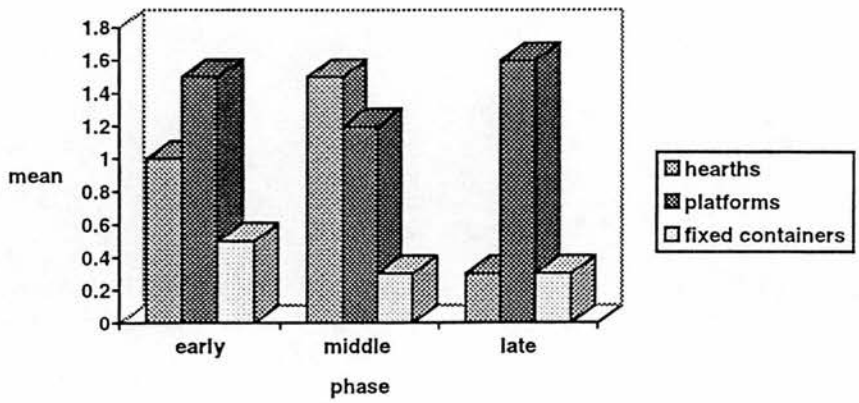


Illustration 91: Vrysi (Peltenburg): Average number of features (hearths, platforms, fixed containers) per unit in each phase and sector.



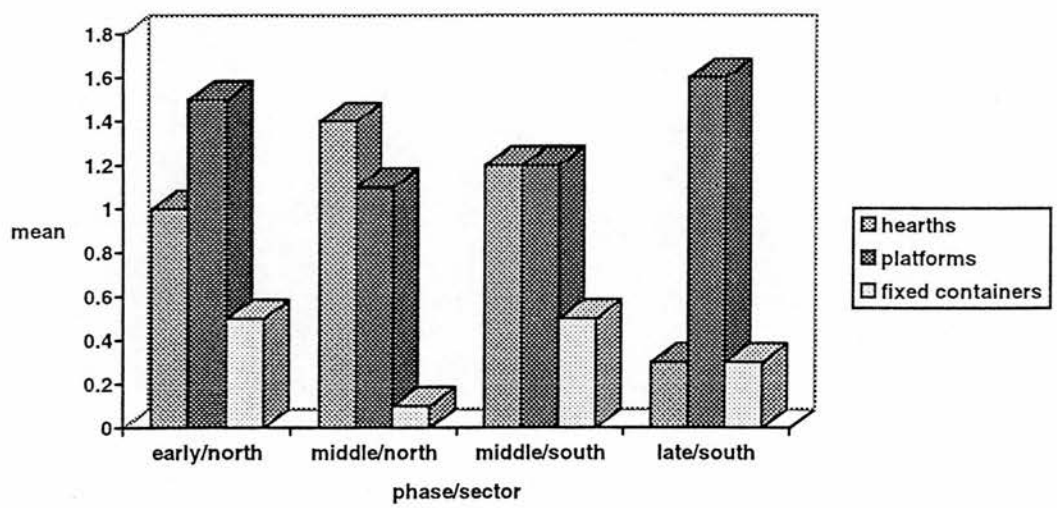
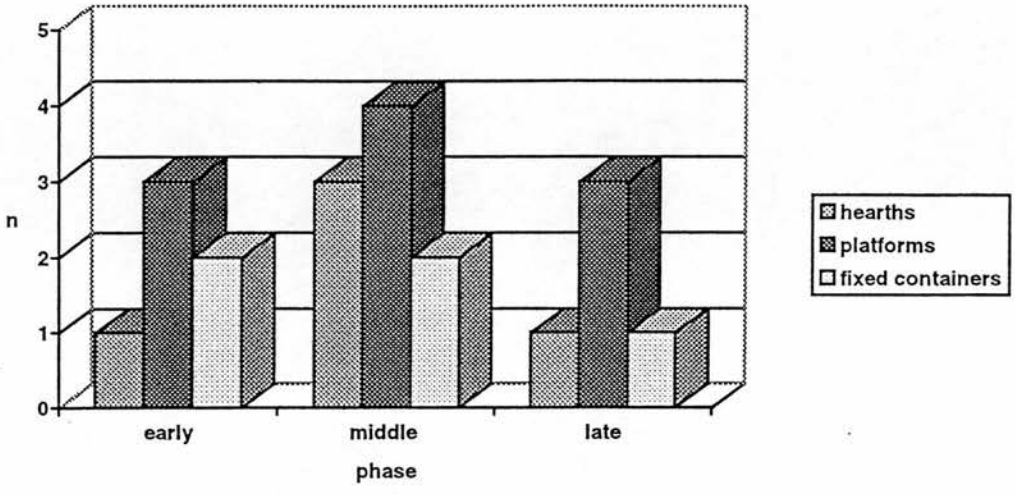


Illustration 92: Vrysi (Peltenburg): number of types of features (hearths, platfroms, ansd fixed containers) per phase and sector.



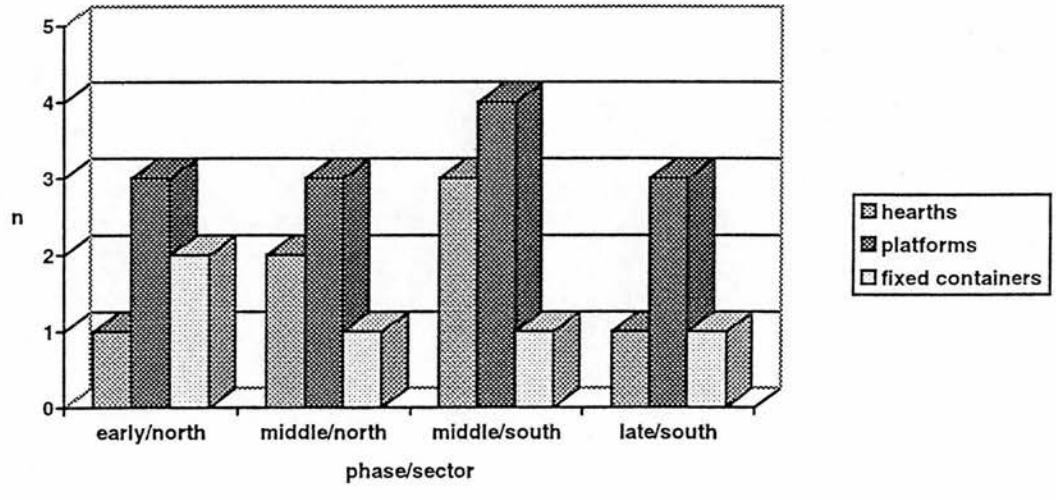
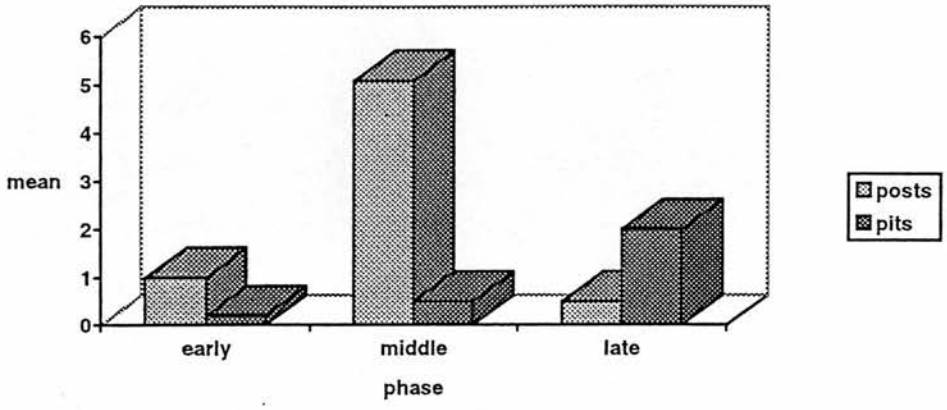


Illustration 93: Vrysi (Peltenburg): Average number of posts and pits per unit in each phase and sector.



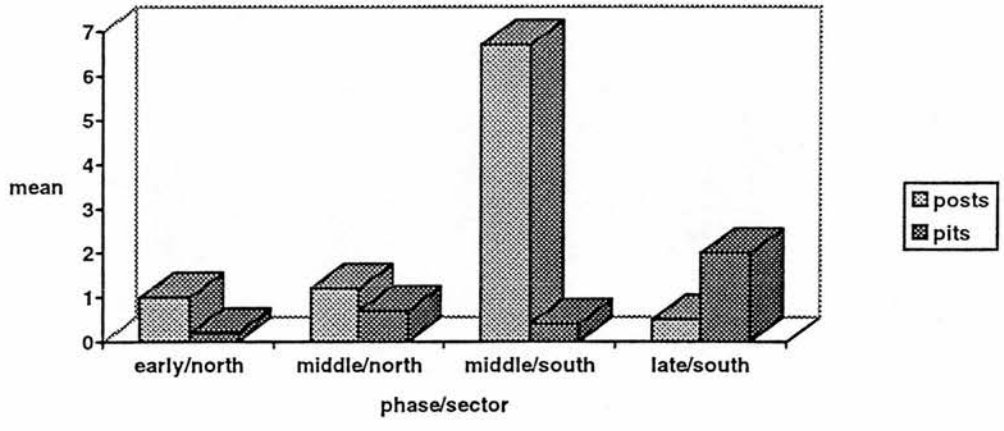
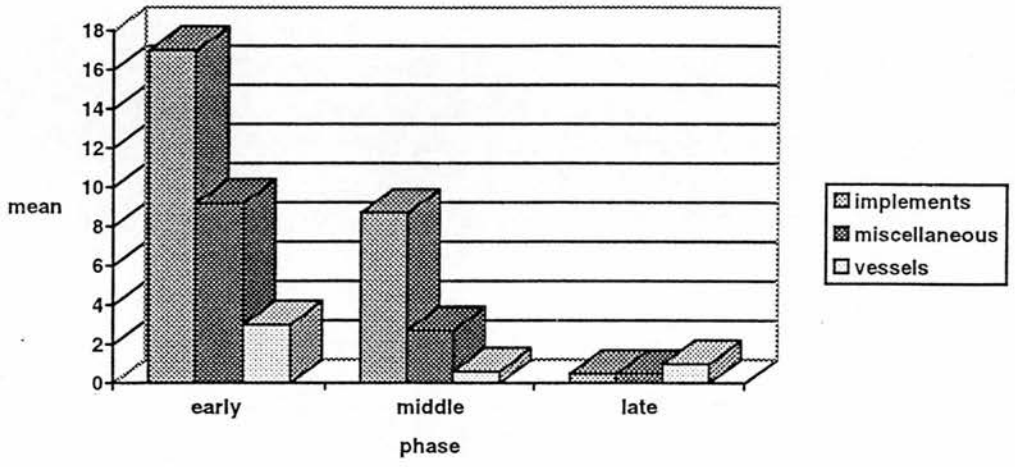


Illustration 94: Vrysi (Peltenburg): Average number of finds (implements, miscellaneous, vessels) per unit in each phase and sector.



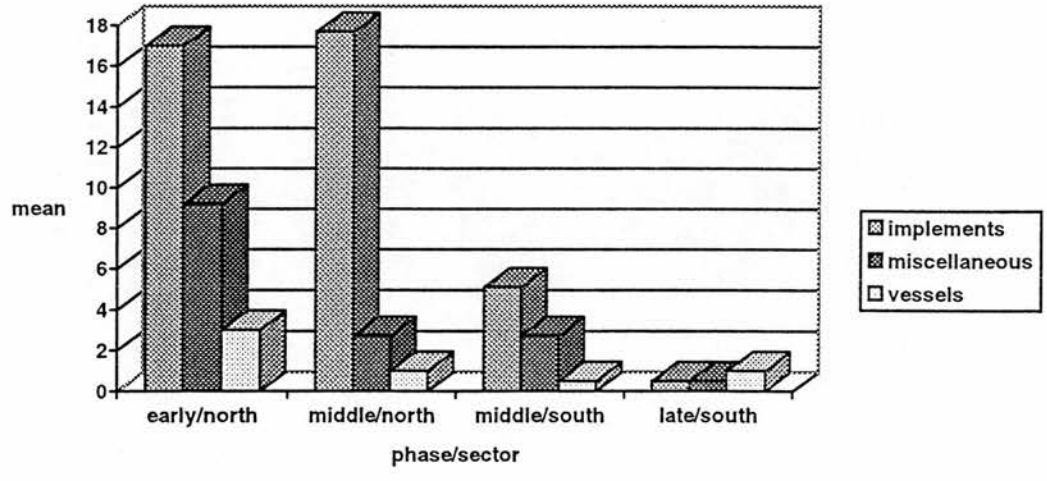
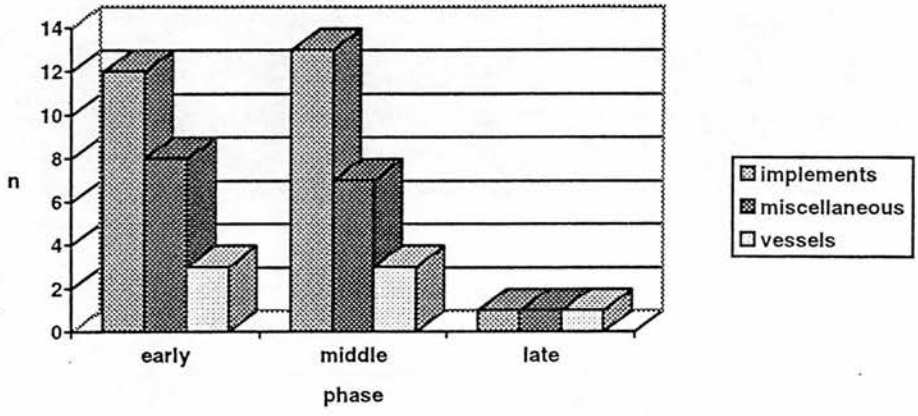


Illustration 95: Vrysi (Peltenburg): Number of types of finds (implements, miscellaneous, vessels) per phase and sector.



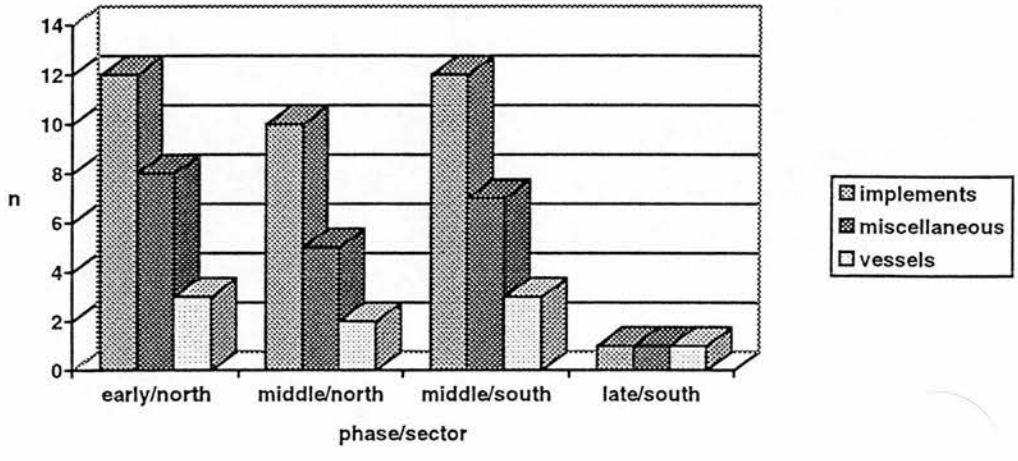
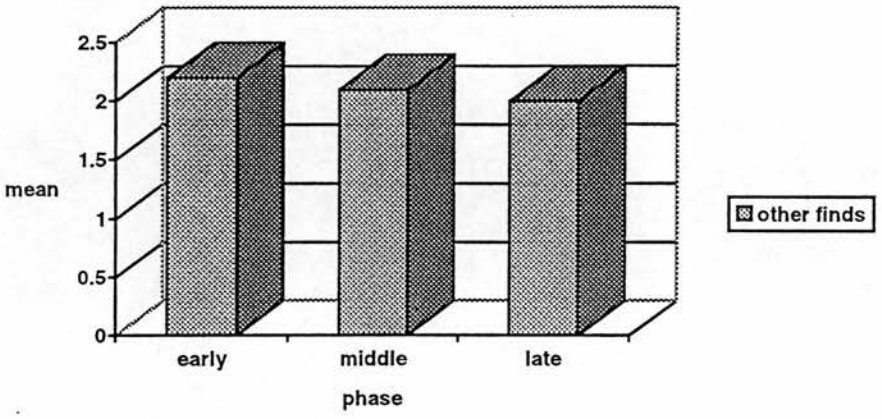


Illustration 96: Vrysi (Peltenburg): Average number of other/unspecified objects per unit in each phase and sector.



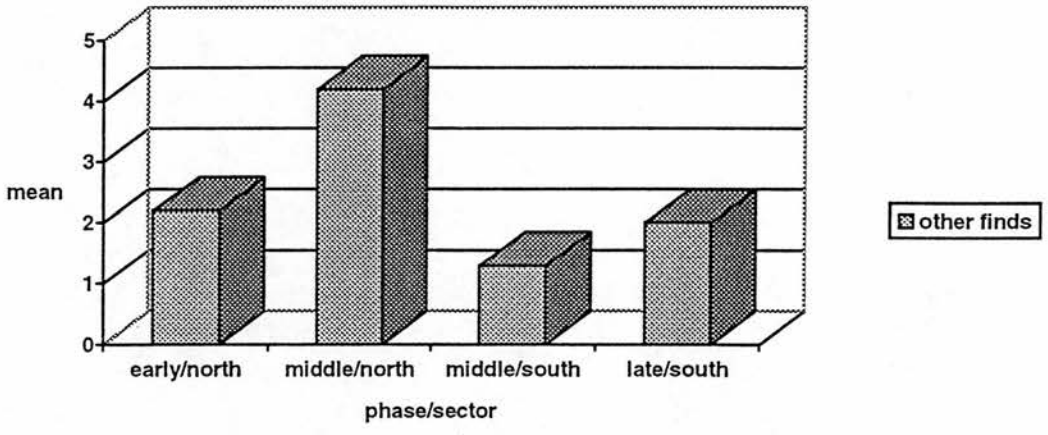
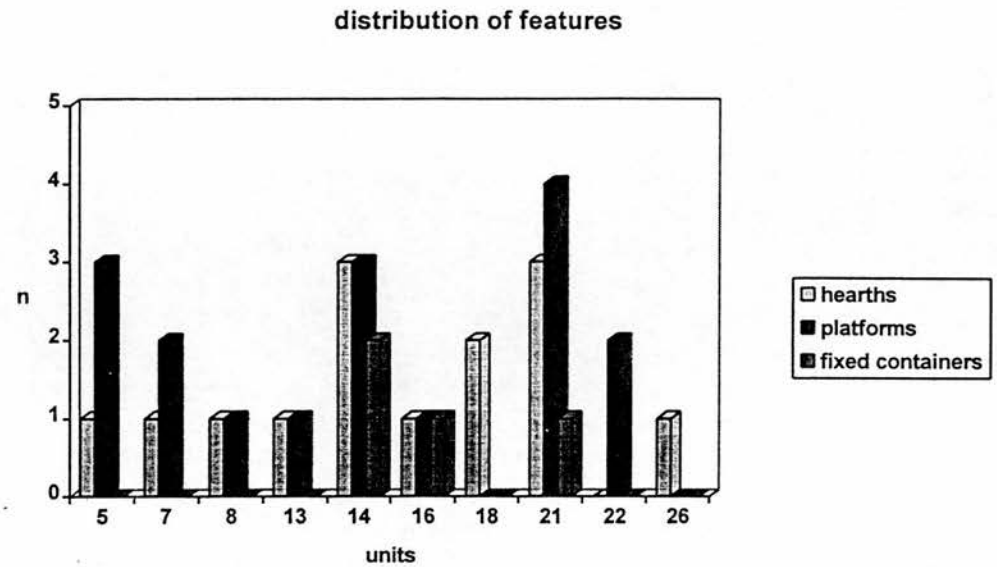
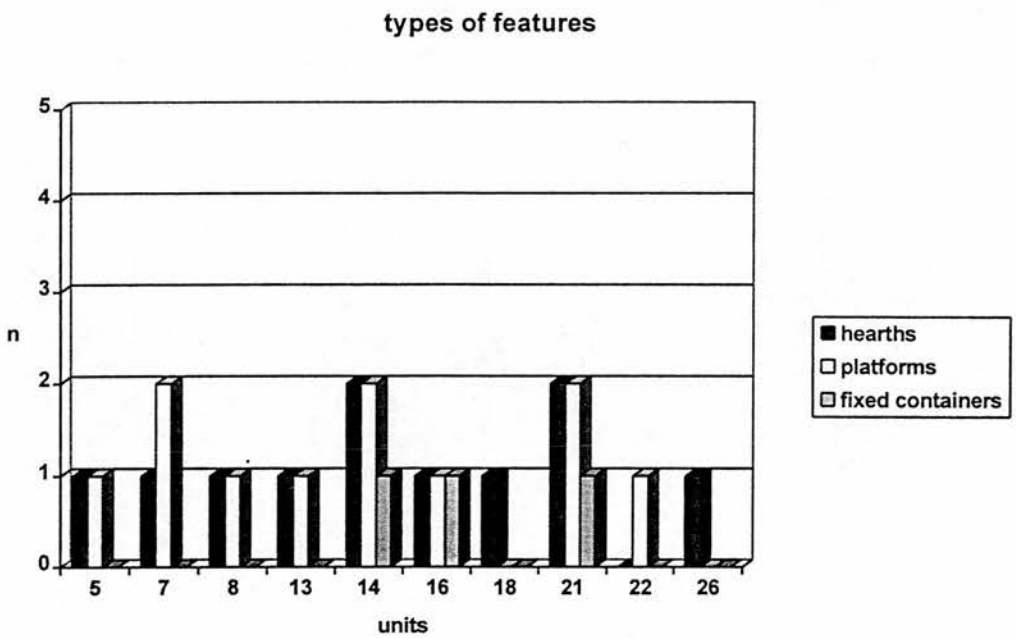


Illustration 97: Vrysi (Peltenburg): Middle phase, both sectors: Distribution of features and their types per unit.

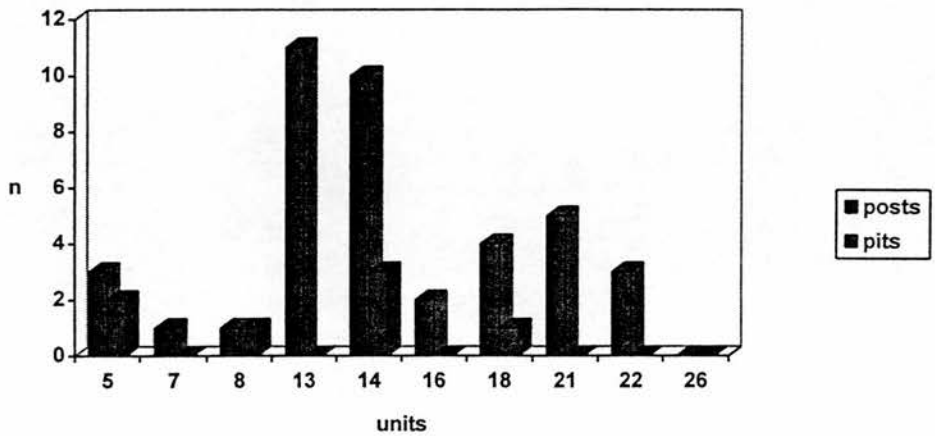




sector	north sector			south sector						
building	B1	B5		B2A		B2B		B3		B4B
units	5	7	8	13	14	16	18	21	22	26
size in m^2	12.60	18.00	18.00	13.00	15.60	7.20	7.20	7.50	7.50	9.00
type of segmentation	A	A	A	Ba/A'	Bc/A'	Bc/A'	A'	A'	A'	A'

Note: types of segmentation: A: no partition, A': no partition but adjacent to another structure, Ba: partition wall, Bc: partition wall forming an enclosed area.

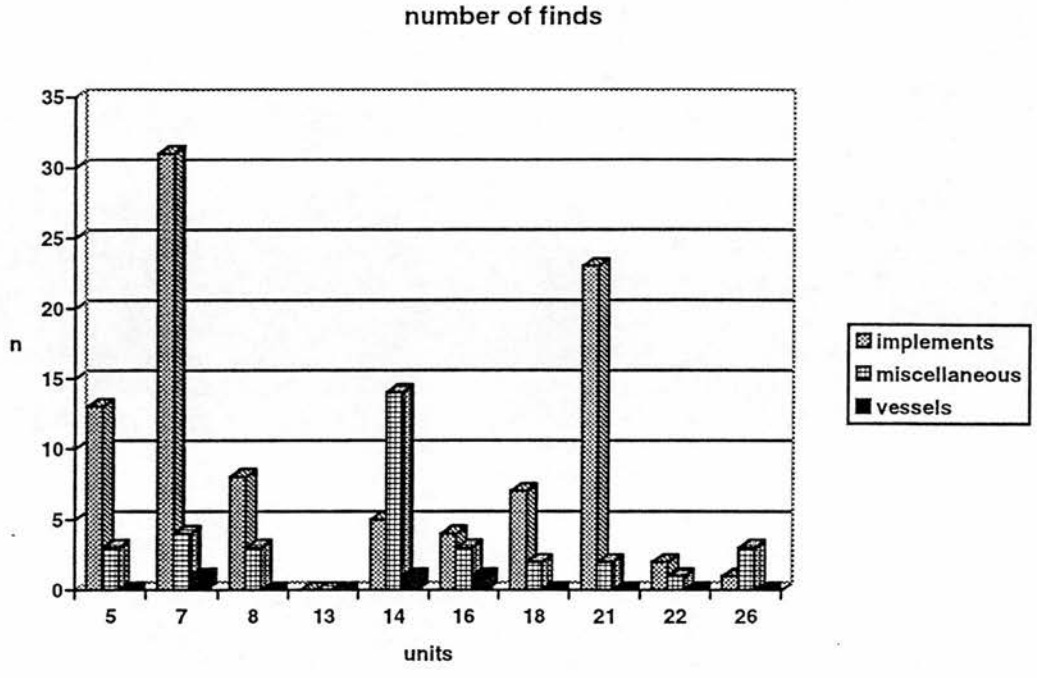
Illustration 98: Vrysi (Peltenburg): Middle phase, both sectors: Distribution of pits and posts.



sector	north sector			south sector						
building	B1	B5		B2A		B2B		B3		B4B
units	5	7	8	13	14	16	18	21	22	26
size in m^2	12.60	18.00	18.00	13.00	15.60	7.20	7.20	7.50	7.50	9.00
type of segmentation	A	A	A	Ba/A'	Bc/A'	Bc/A'	A'	A'	A'	A'

Note: types of segmentation: A: no partition, A': no partition but adjacent to another structure, Ba: partition wall, Bc: partition wall forming an enclosed area.

Illustration 99: Vrysi (Peltenburg): Middle phase, both sectors: Distribution of finds and their types.



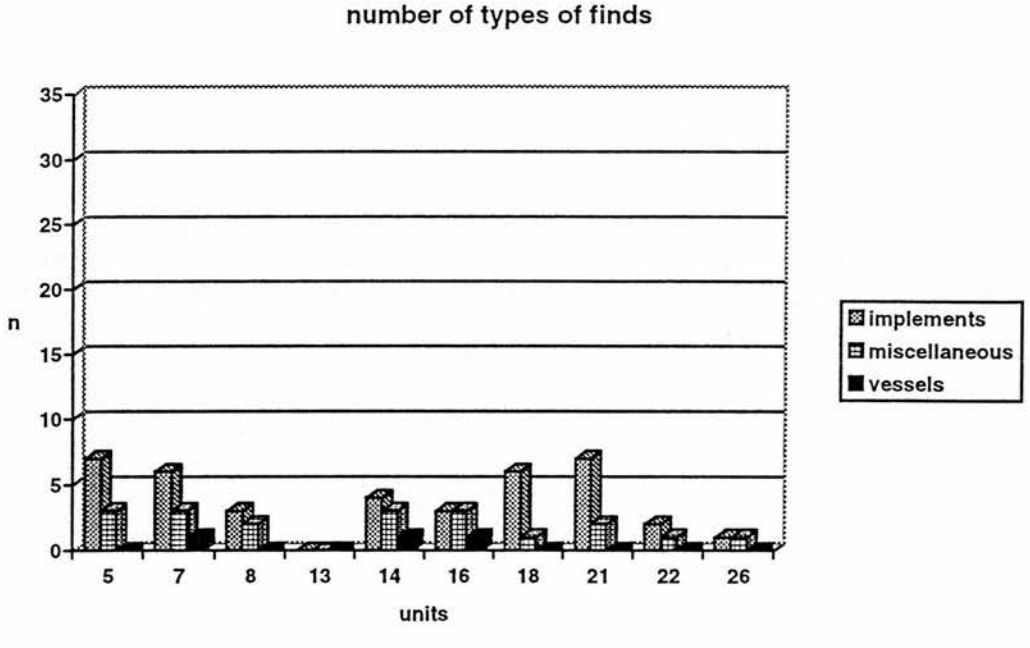
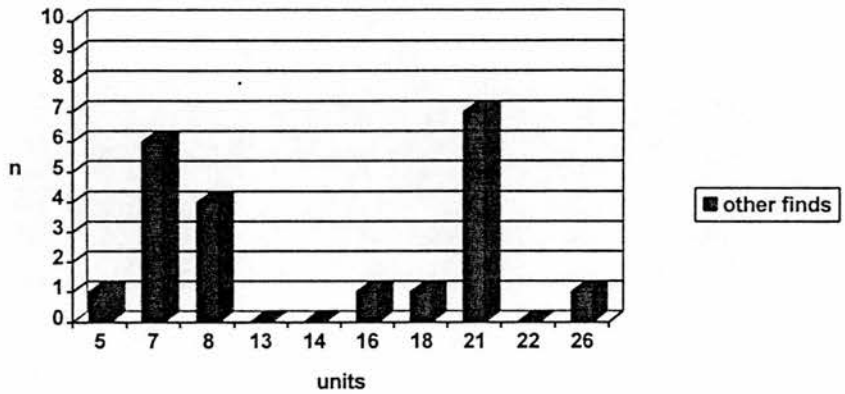


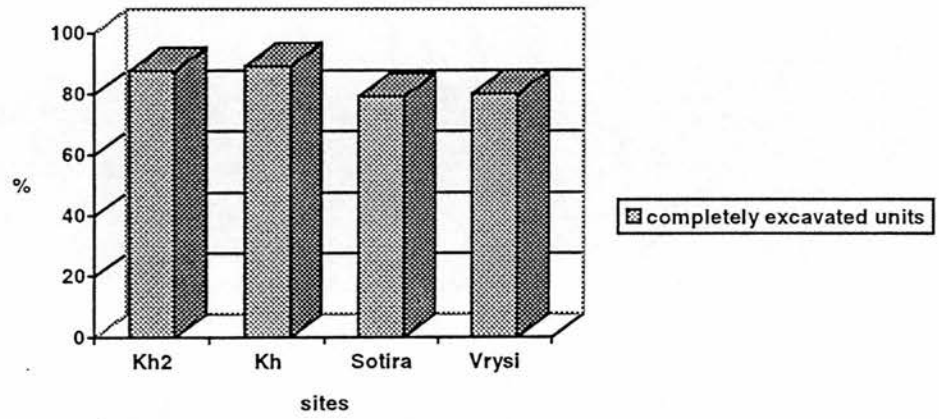
Illustration 100: Vrysi (Peltenburg): Middle phase, both sectors: Distribution of other/unspecified finds.

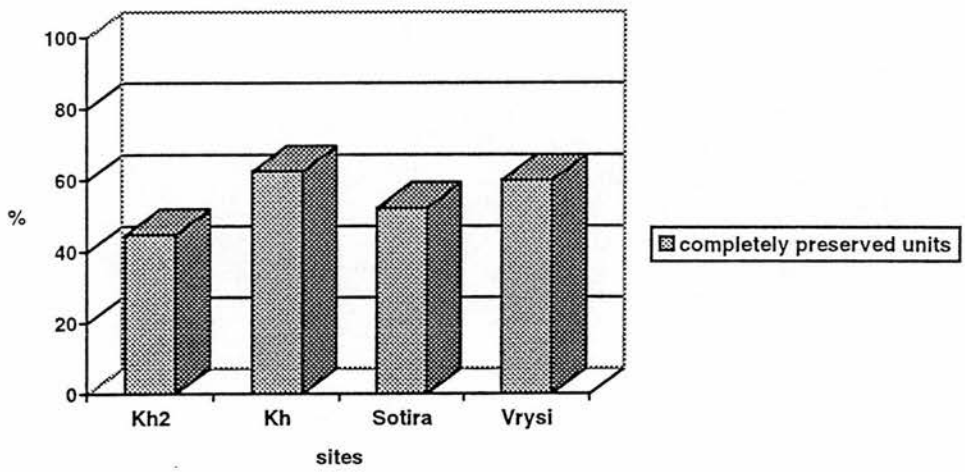


sector	north sector			south sector						
building	B1	B5		B2A		B2B		B3		B4B
units	5	7	8	13	14	16	18	21	22	26
size in m^2	12.60	18.00	18.00	13.00	15.60	7.20	7.20	7.50	7.50	9.00
type of segmentation	A	A	A	Ba/A'	Bc/A'	Bc/A'	A'	A'	A'	A'

Note: types of segmentation: A: no partitions, A': no partitions but adjacent to another structure, Ba: partition wall, Bc: partition wall forming an enclosed area.

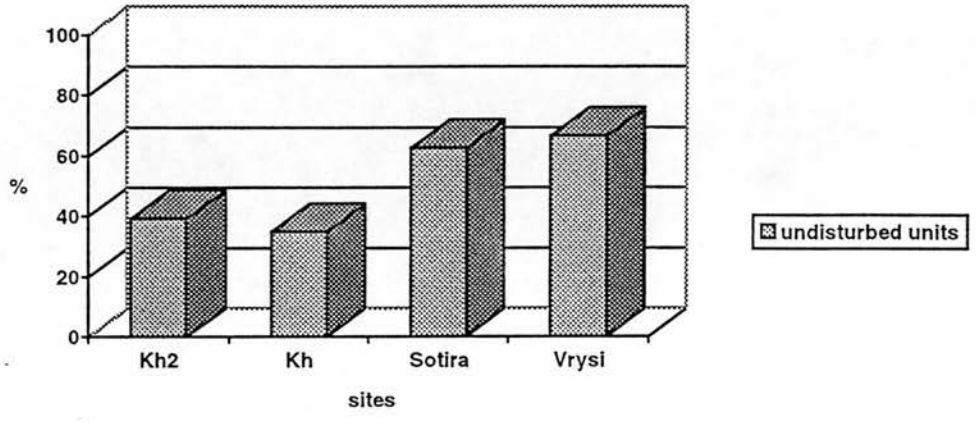
Illustration 101: Completely excavated and preserved units (according to the Data Quality Control Factors) from Khirokitia, Sotira and Vrysi.

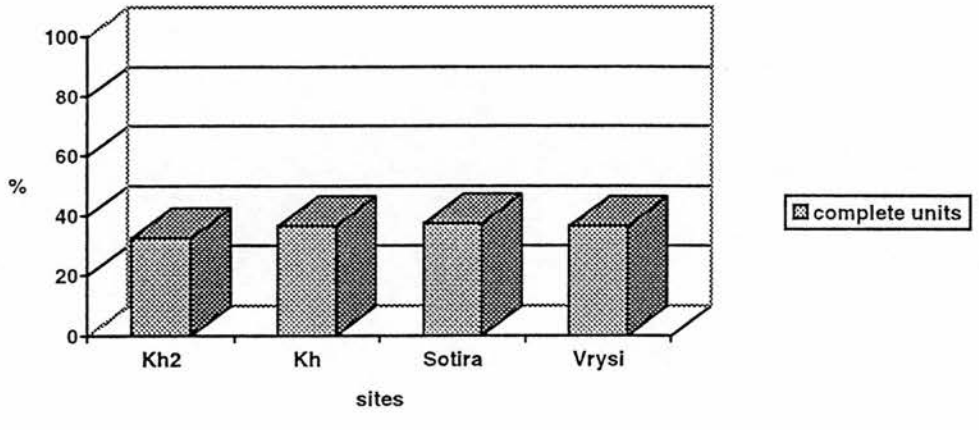




Note: Kh2: Khirokitia-Le Brun; Kh: Khirokitia-Dikaios

Illustration 102: Distribution of undisturbed and complete units (according to the Data Quality Control Factors).





Note: Kh2: Khirokitia-Le Brun; Kh: Khirokitia-Dikaios

Illustration 103: Units which are not associated with finds (or are associated with very few finds).

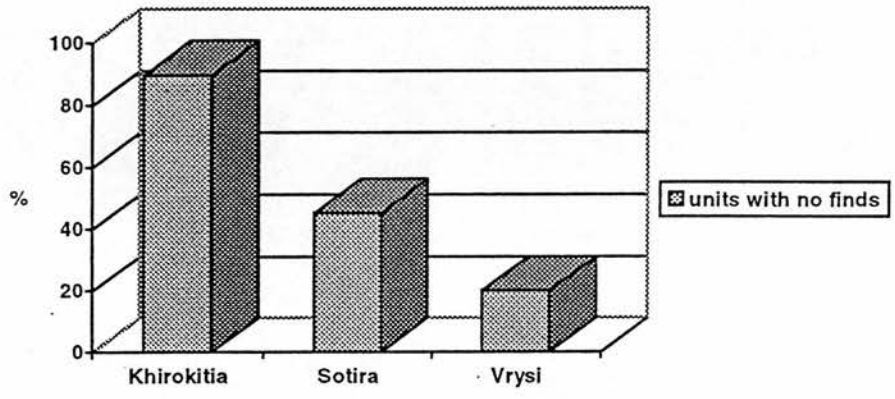
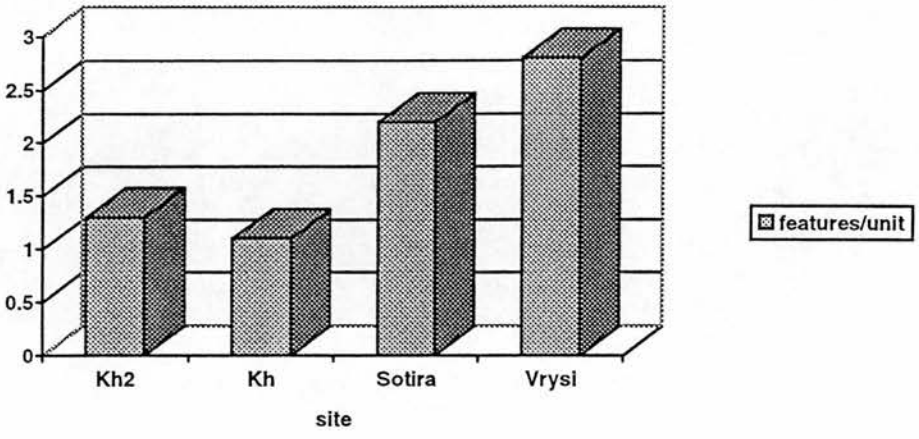


Illustration 104: Average number of features and finds per unit in each site.



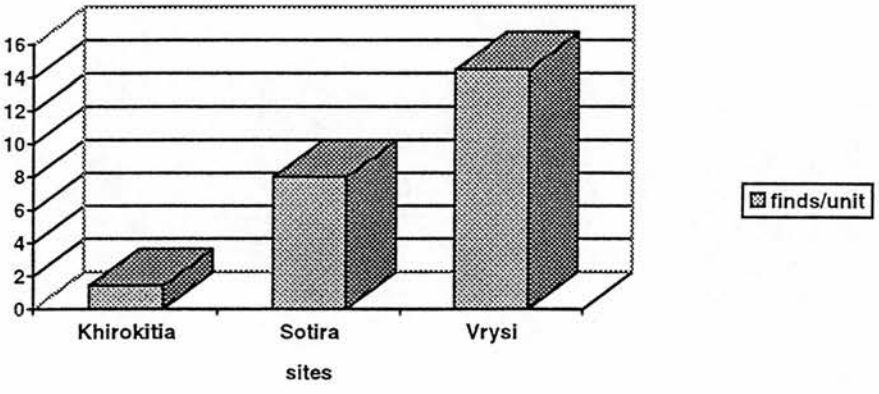
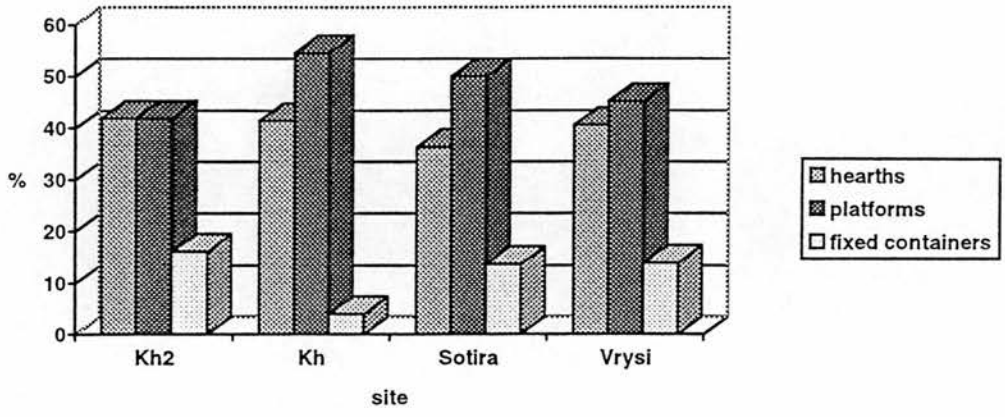


Illustration 105: Typological variability of features and finds per unit.



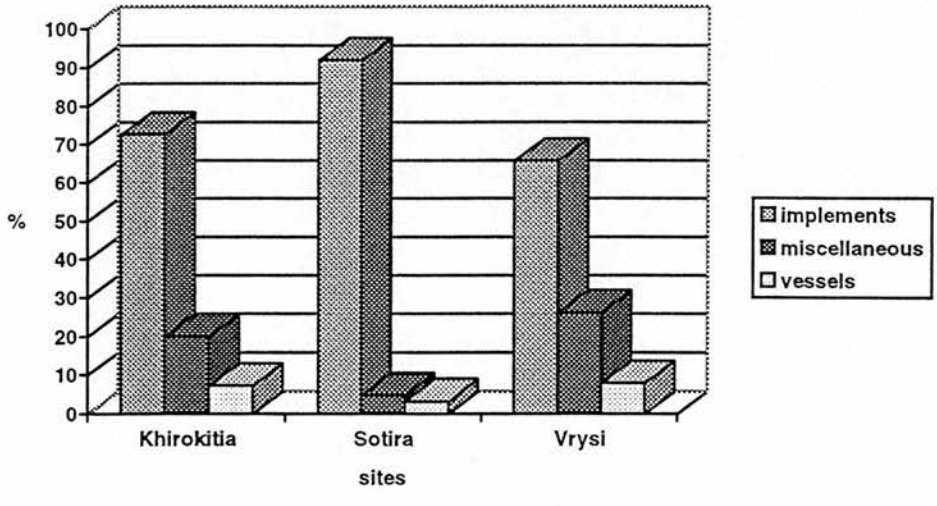


Illustration 106a: Number of floors with certain types of features in each of the three sites: Khirokitia, Sotira and Vrysi.

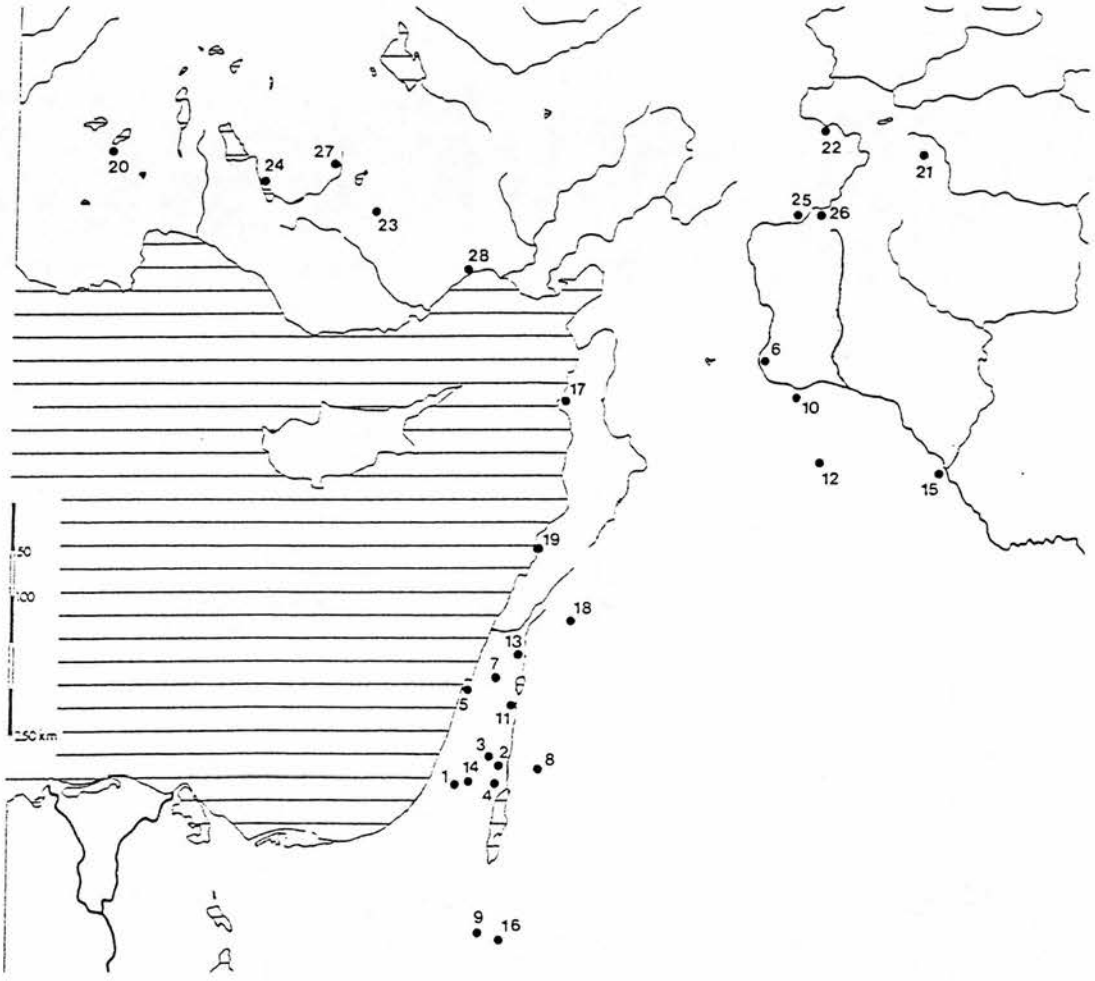
sector/phase	number of floors and types of features							
	empty	hearth	platform	container	hearth / platform	hearth / container	platform/container	hearth/platform/container
Khirokitia 2								
east / C		1			2			1
east / B		3			4			
west / III		1			5	1	1	
west / II		1	3		3	1		
west / I			1		2			1
Khirokitia								
east/ II	3	1	3					
east / III		1			1			
west / I		1						
west / II	5	6	3		5			
west / III	1							
Sotira								
I		1			1			
II	1	1			3			4
III	2	2			3		1	2
IV		2						1
Vrysi								
middle / north					3			
middle / south		2	1					3

Illustration 106b : Number of floors with certain types of finds in each of the three sites: Khirokitia, Sotira and Vrysi.

sector / phase	number of floors and type of finds							
	empty	implements	other finds	vessels	implements / other finds	implements / vessels	other finds / vessels	implements / other finds / vessels
Khirokitia								
east/ II	4	2				1		
east / III		2						
west / I	1							
west / II	9	5	4		1			
west / III	1							
Sotira								
I	2							
II	1	1		1	2			4
III	3	7			1	1		
IV		3						
Vrysi								
middle / north					3			
middle / south	1				4			2

Note: only units from level II of analysis (i.e. complete and undisturbed) are included in this table.

Illustration 107: Map of Anatolia and Levant, showing the Neolithic sites under examination.



Key of sites:

Levant:

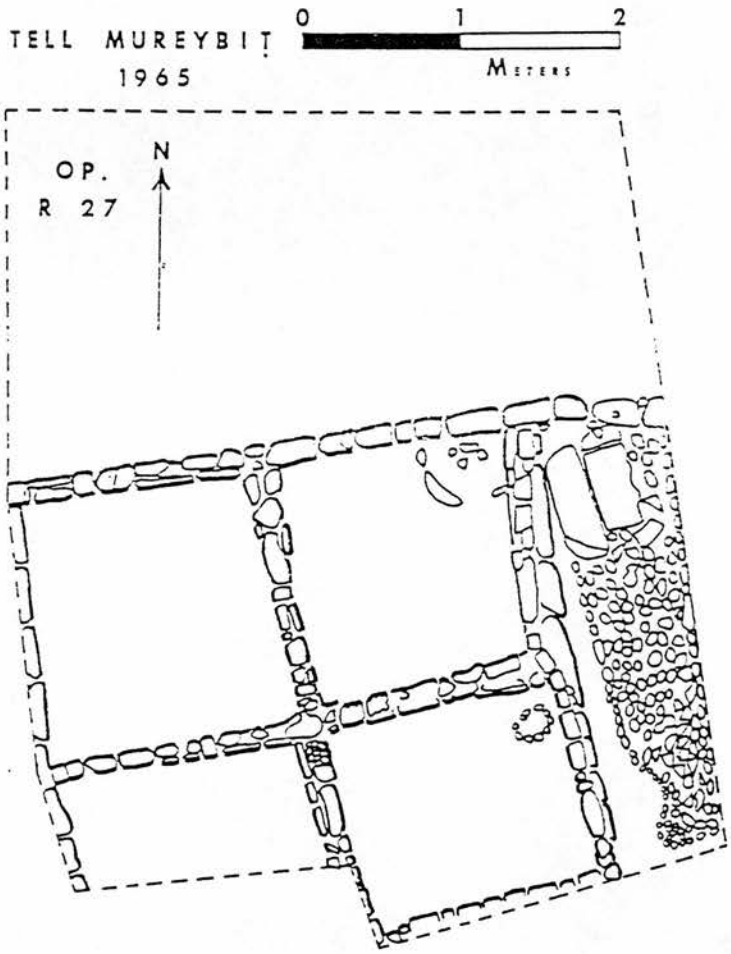
1. Hatoula
2. Gilgal
3. Netiv Hagdud
4. Jericho
5. Nahal Oren
6. Mureybet
7. Yiftahel
8. 'Ain Ghazal
9. Beidha
10. Tell Abu Hureyra
11. Munhata
12. El Khom
13. Beisamoun
14. Abu Gosh
15. Bouqras
16. Basta
17. Ras Shamra
18. Tell Ramad
19. Byblos

Anatolia:

20. Haçilar
21. Çayönü
22. Cafer Höyük
23. Can Hasan III
24. Suberde
25. Gritille
26. Nevalla Çori
27. Çatal Höyük
28. Mersin

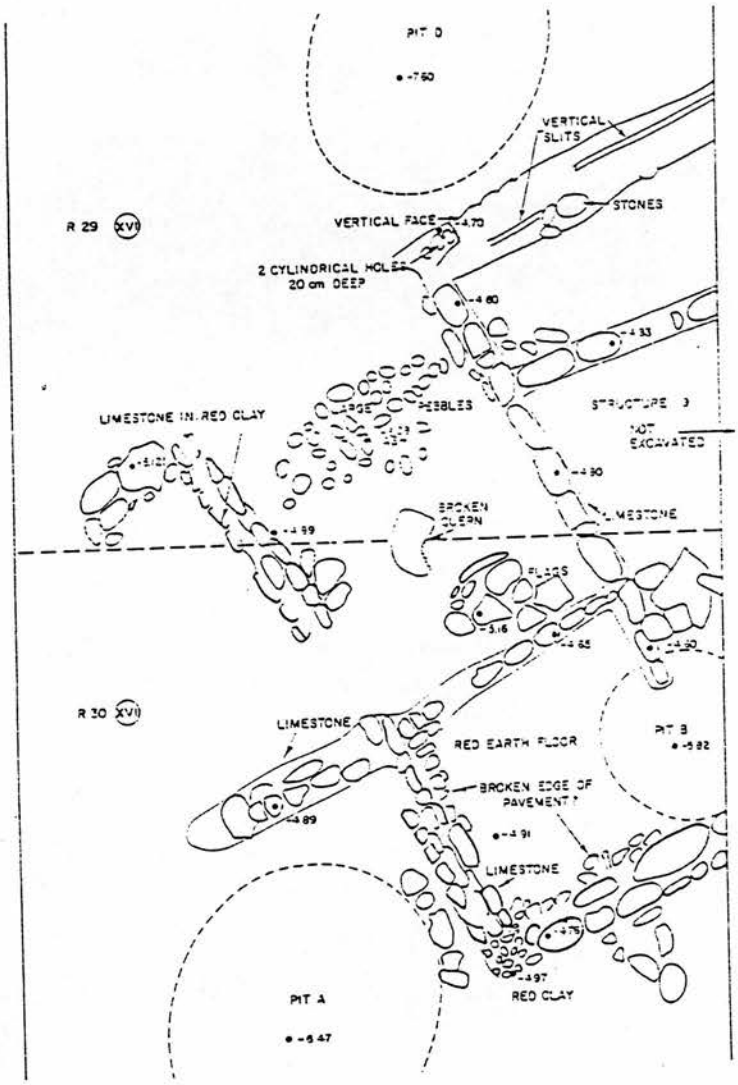
(after Hours et al. 1994)

Illustration 108: Mureybet, Period 2, level XIV, structure 16.



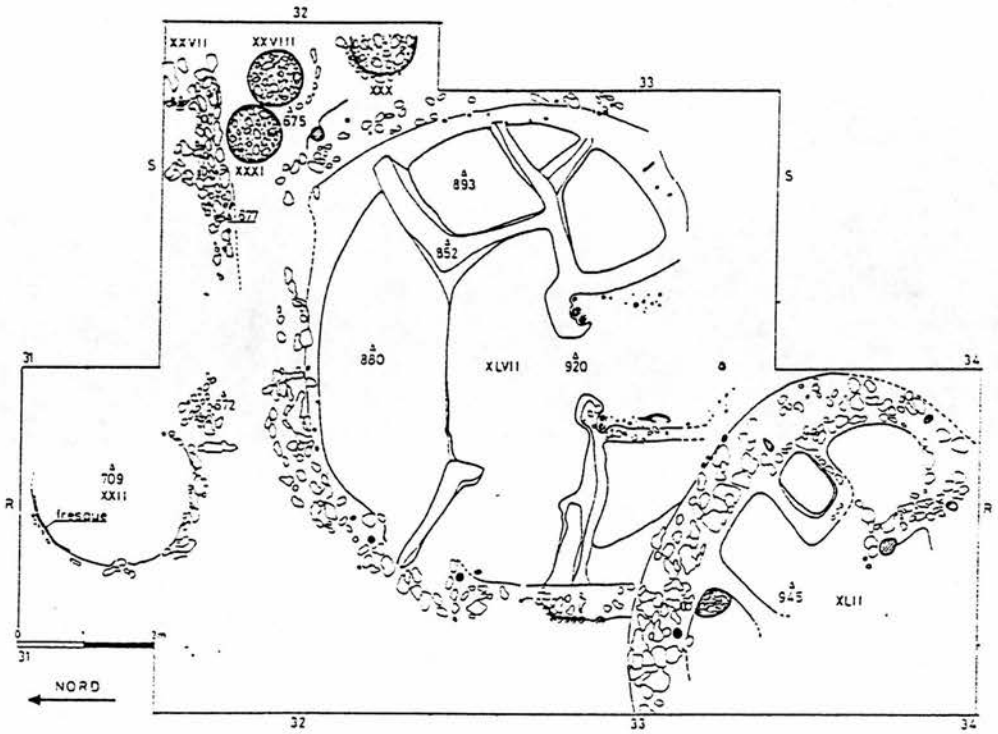
(taken from Van Loon 1968: fig. 6)

Illustration 109: Mureybet, Period 2, level XVI, structure 19.



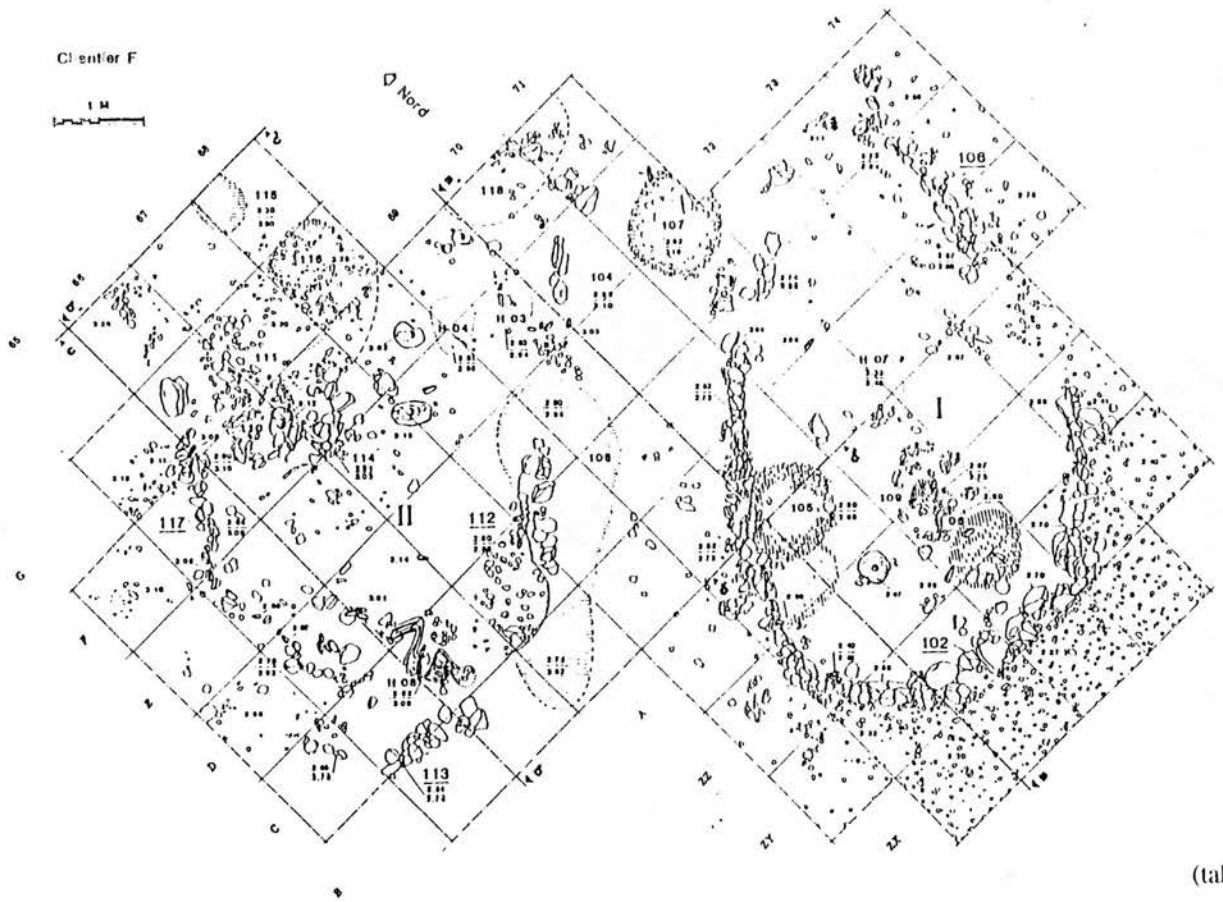
(taken from Van Loon 1968: fig. 7)

Illustration 110: Mureybet. Period 2, phase III, structures XLVII, XXII, XLII.



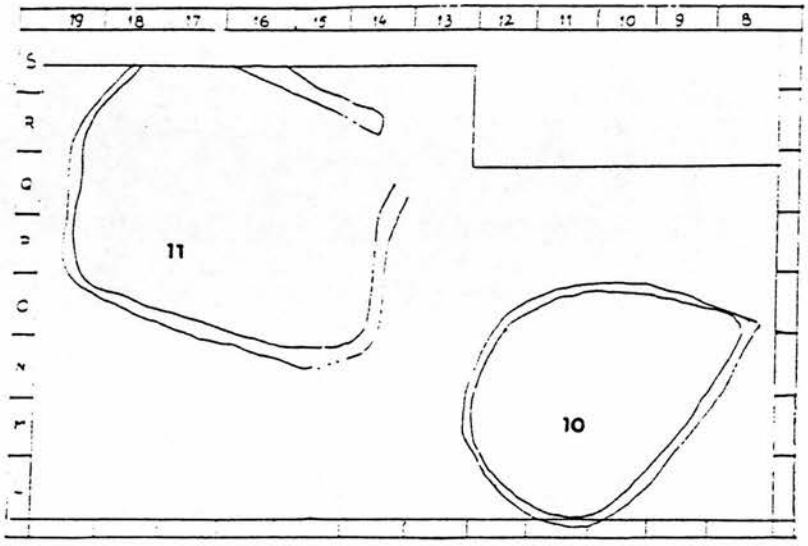
(taken from Cauvin 1977: fig. 10)

Illustration 111: Hatoula, Period 2, sector F, structures I and II.



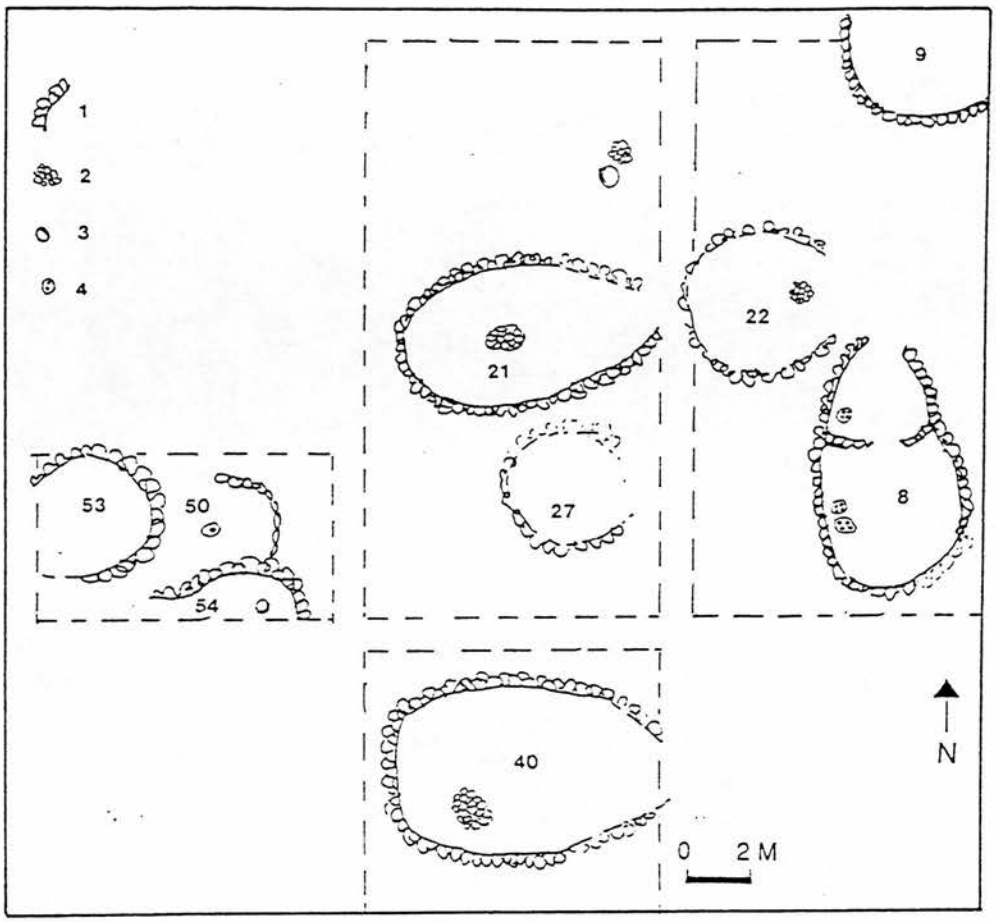
(taken from Lechevallier and Ronen 1985: fig. 11)

Illustration 112: Gilgal, Period 2, schematic plan of structures 11 and 10.



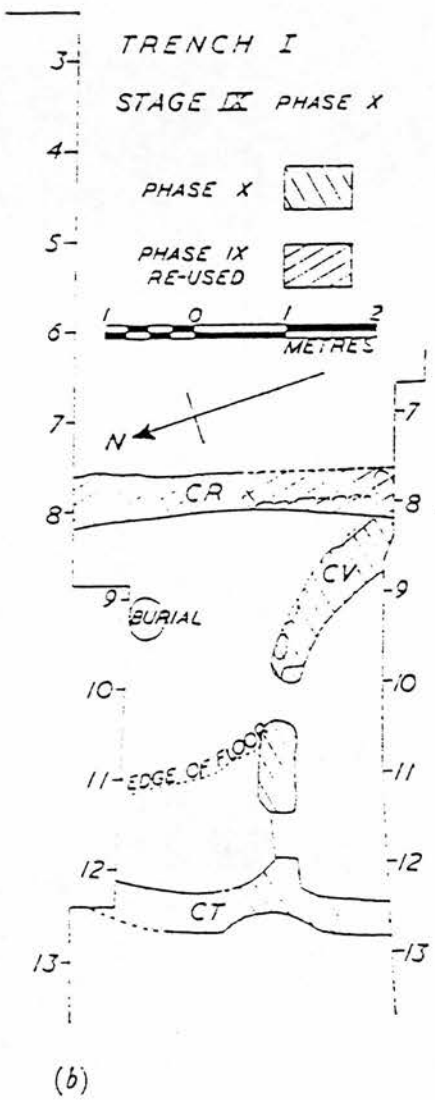
(taken from Noy 1989: fig. 2)

Illustration 113: Netiv Hagdud, Period 2, schematic plan.



(taken from Bar-Yosef and Belfer-Cohen 1992: fig. 7)

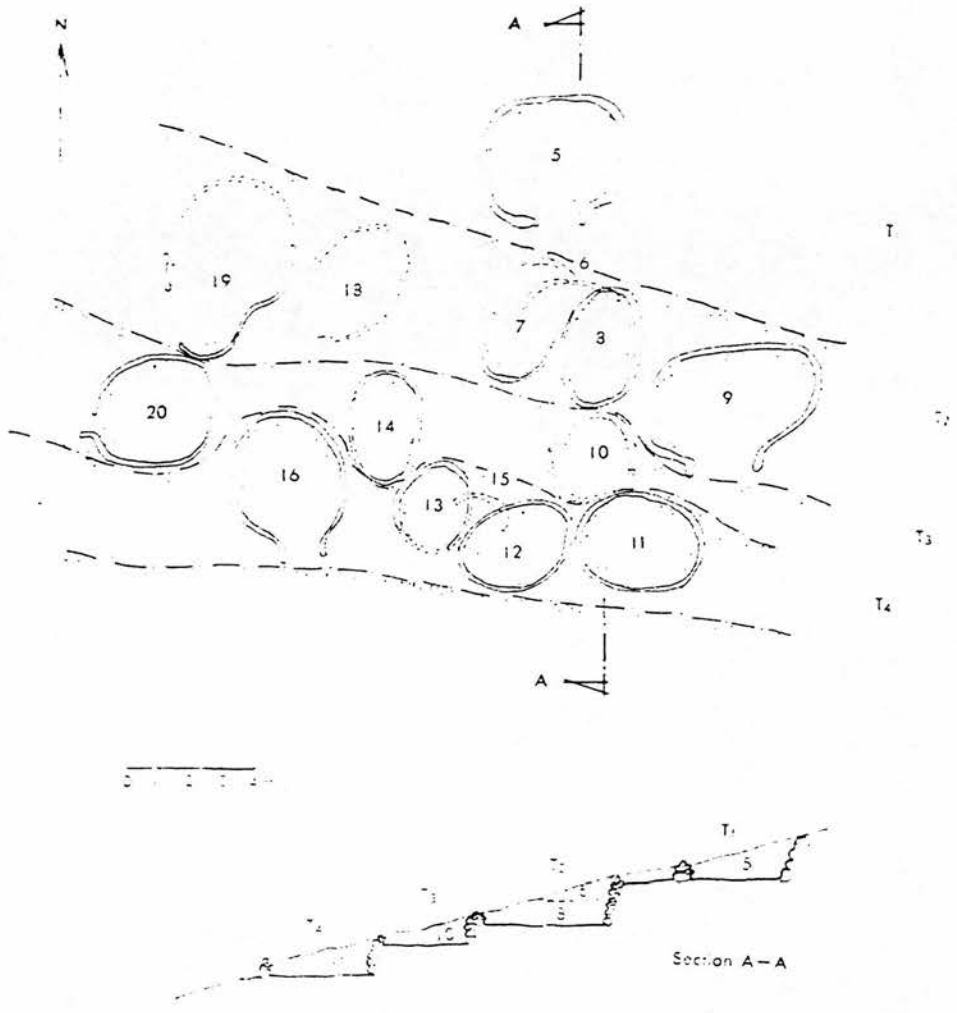
Illustration 114: Jericho. Period 2. Trench I. Stage IX. phase X.



(b)

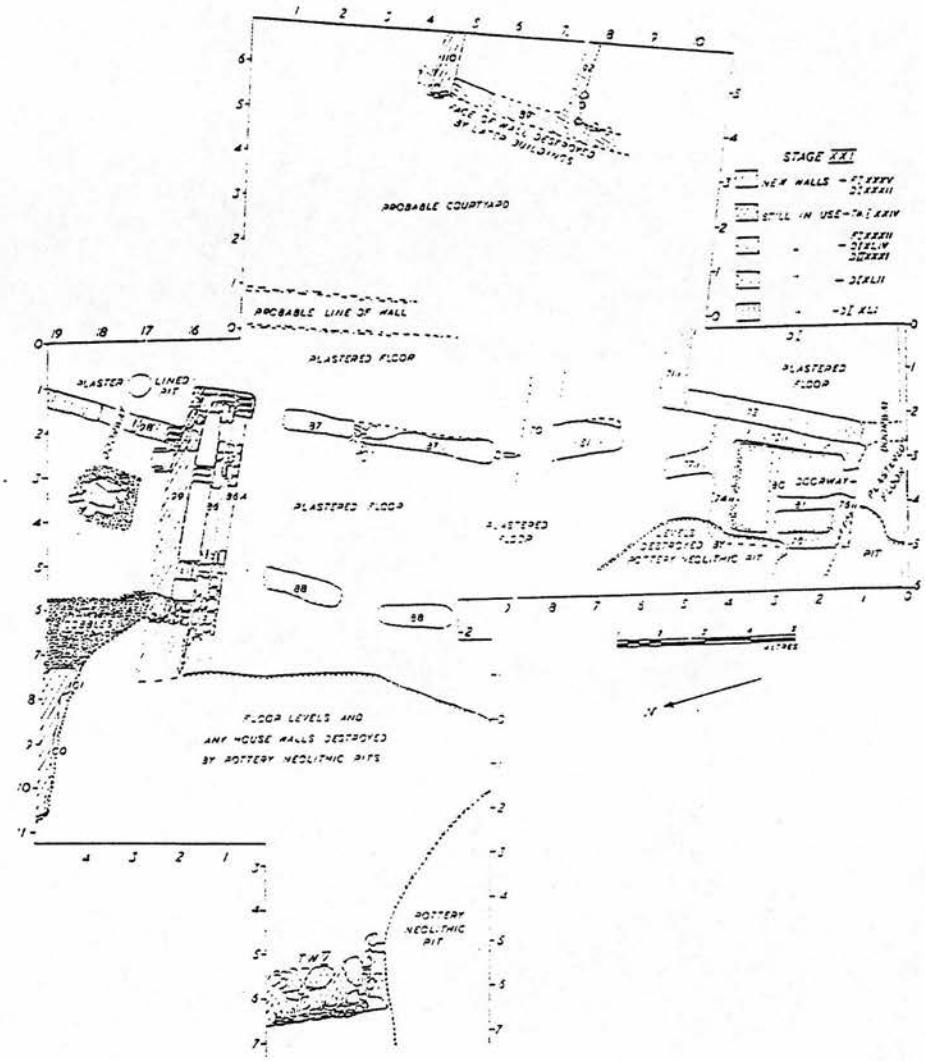
(taken from Kenyon 1981: plate 215)

Illustration 115: Nahal Oren, Period 2, plan of structures in stratum II.



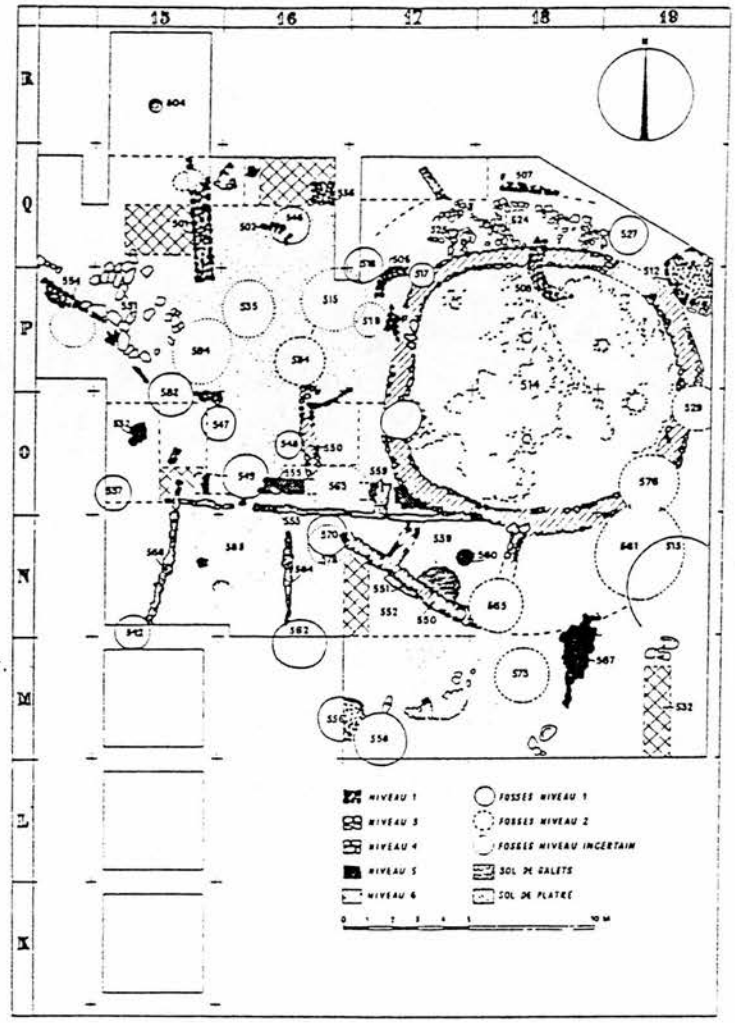
(taken from Stekelis and Yizraely 1963: fig. 3)

Illustration 116: Jericho, Period 3, Trench I, stage XXI.



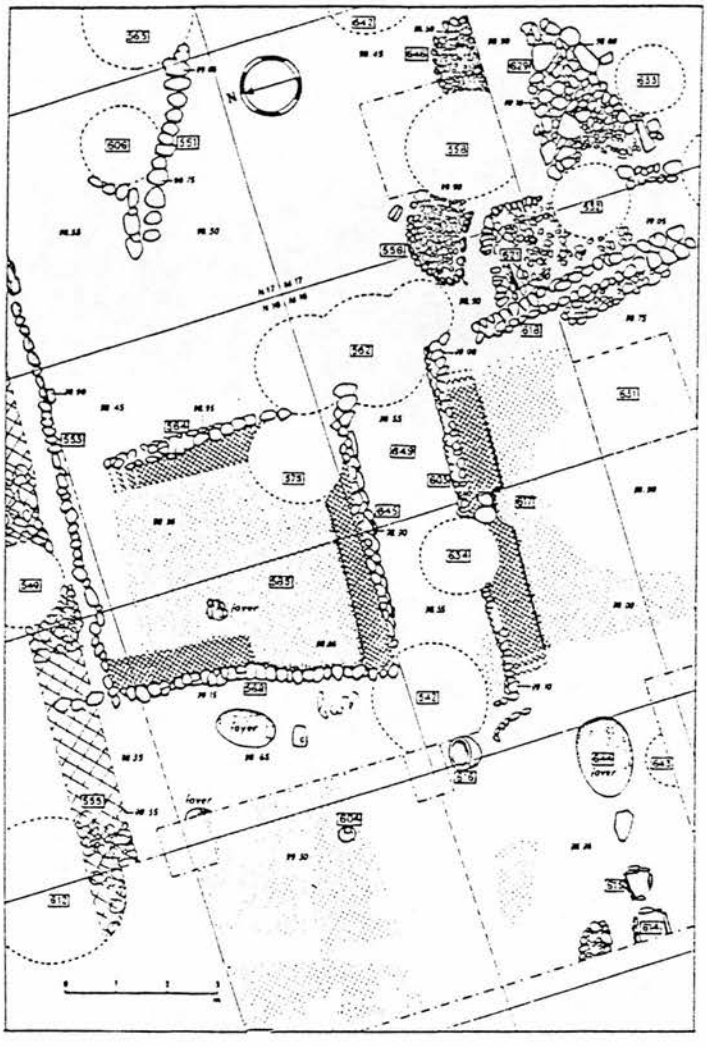
(taken from Kenyon 1981: plate 224)

Illustration 117: Munhata, Period 3.



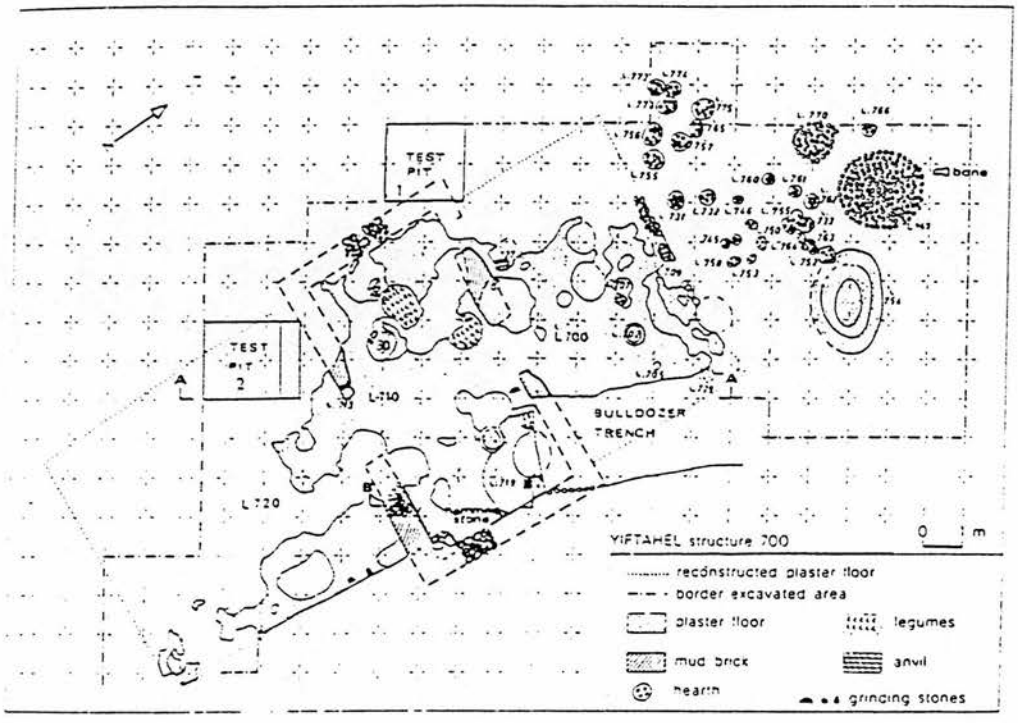
(taken from Perrot 1964: fig. 2)

Illustration 118: Munhata. Period 3. sector L-O 14-17.



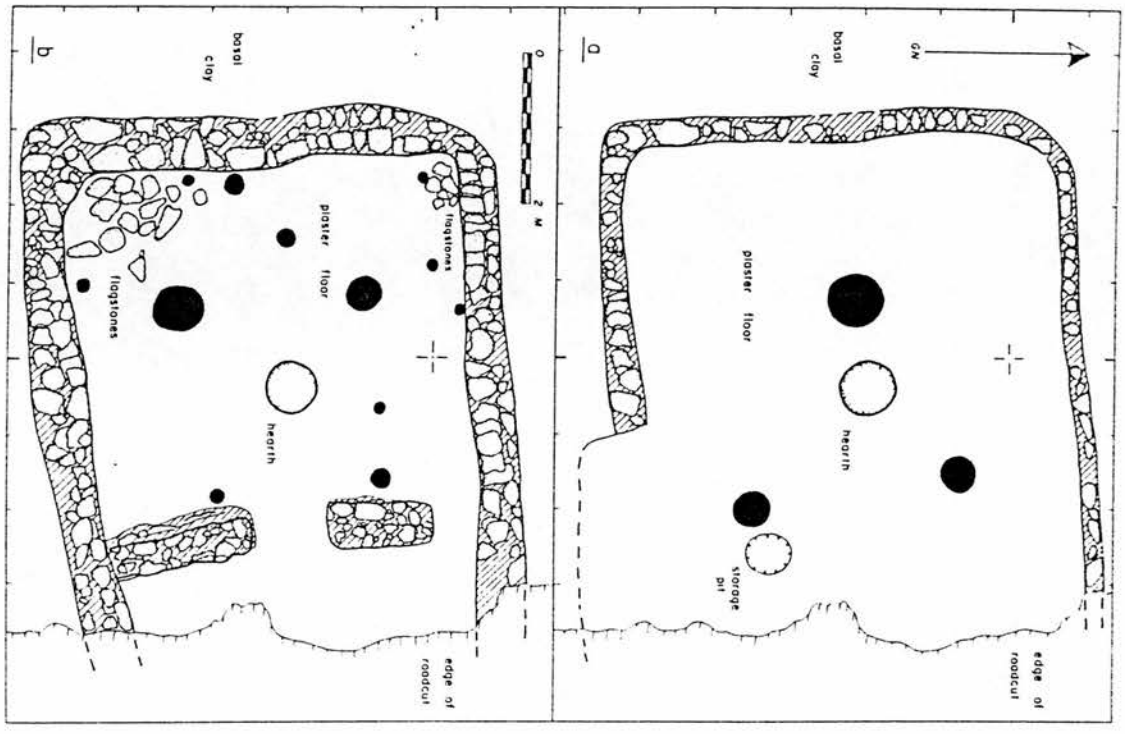
(taken from Perrot 1965: fig. 1)

Illustration 119: Yiftahel. Period 3. structure 700.



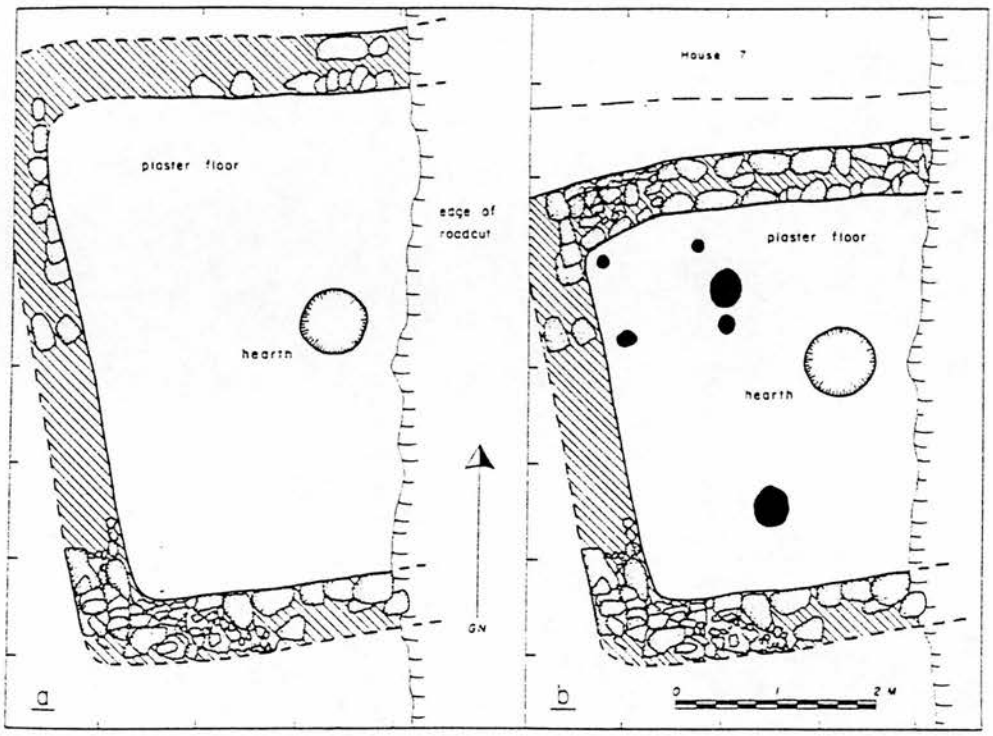
(taken from Garfinkel 1987: fig. 6)

Illustration 120: 'Ain Ghazal, Period 3, structure 4.



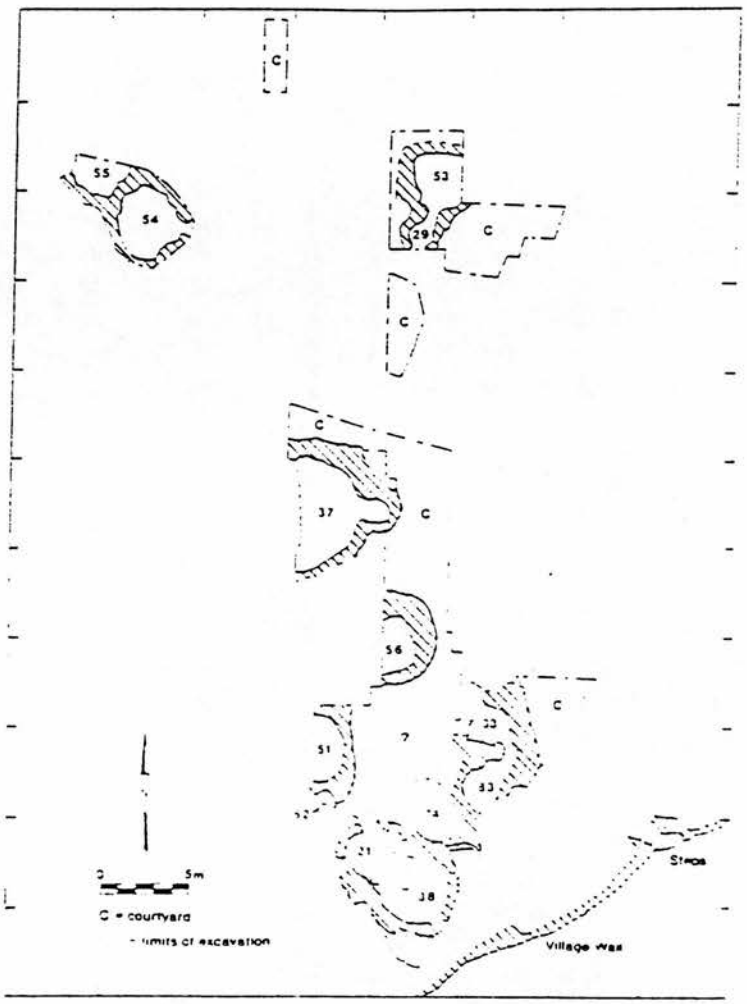
(taken from Banning and Byrd 1987: fig. 3)

Illustration 121: 'Ain Ghazal, Period 3, structure 8.



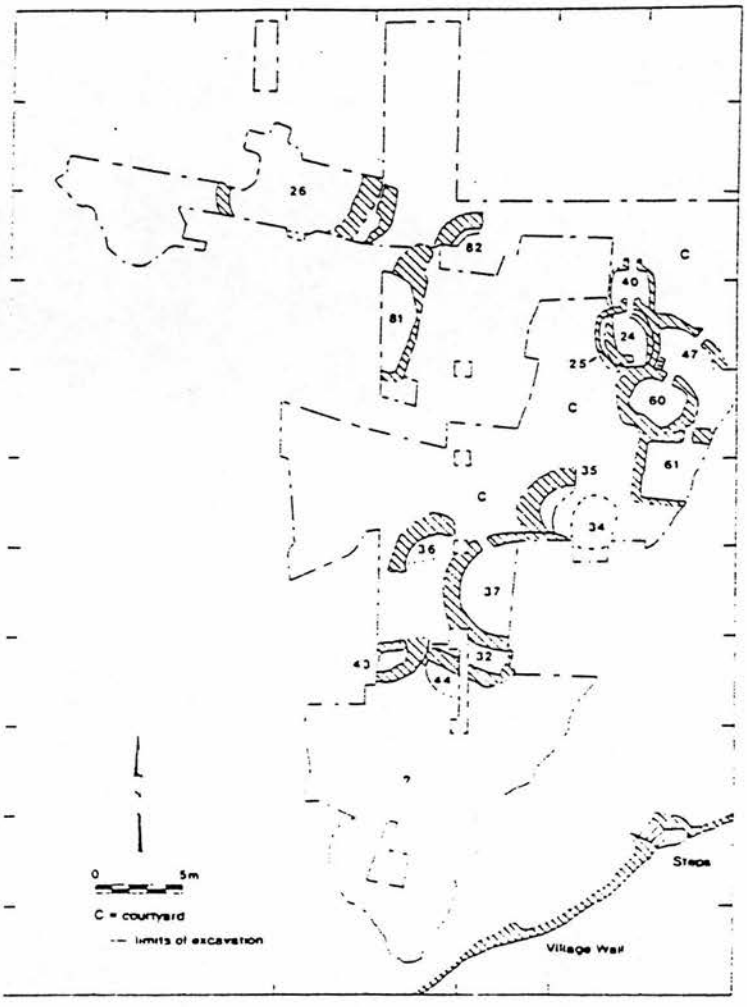
(taken from Banning and Byrd 1987: fig. 6)

Illustration 122: Beidha. Period 3. plan of phase A.



(taken from Byrd 1994: fig. 3)

Illustration 123: Beidha, Period 3, plan of phase B.

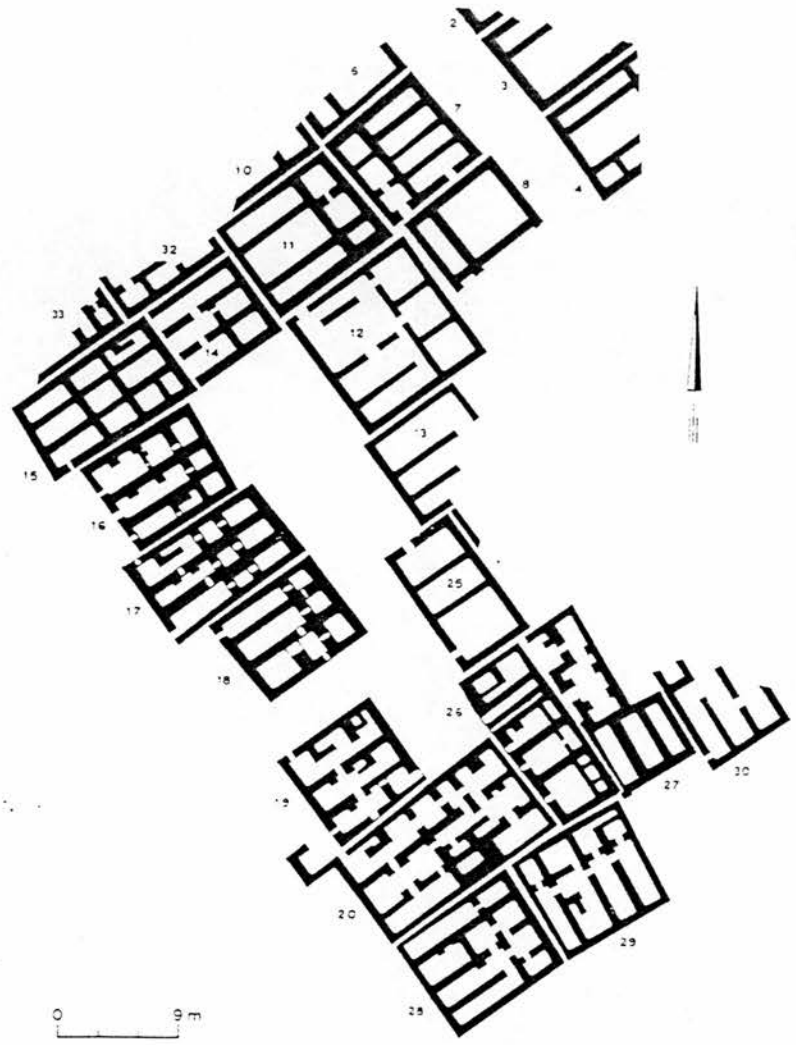


(taken from Byrd 1994: fig. 5)

Illustration 124: Beidha. Period 3. phase C.

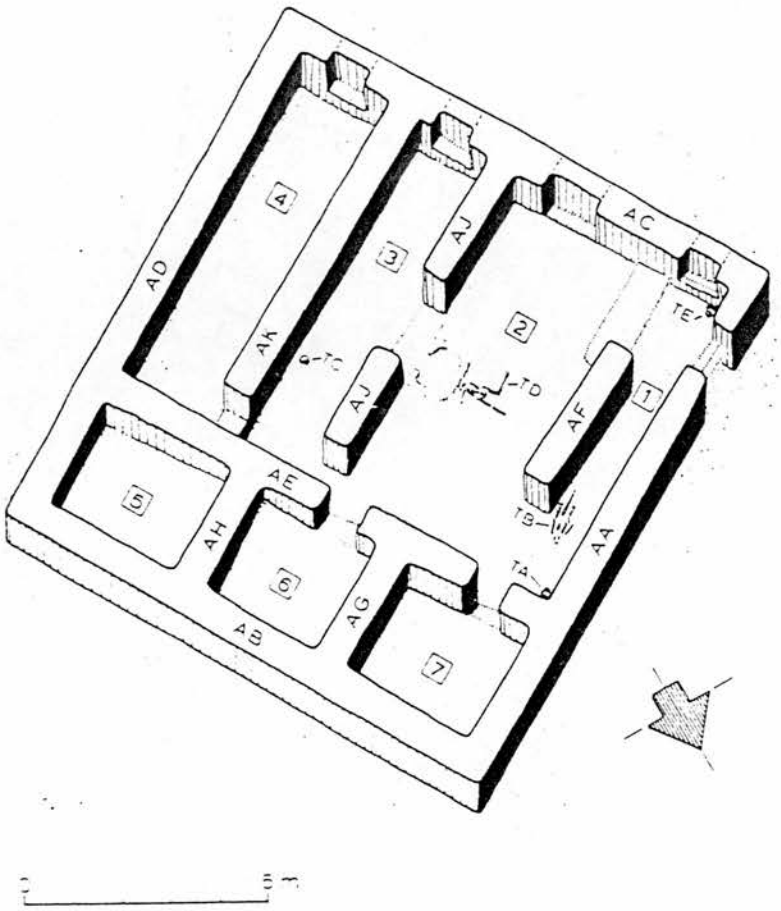
(taken from Byrd 1994: fig. 7)

Illustration 125: Bouqras. Period 4, plan of the SW quarter of the village.



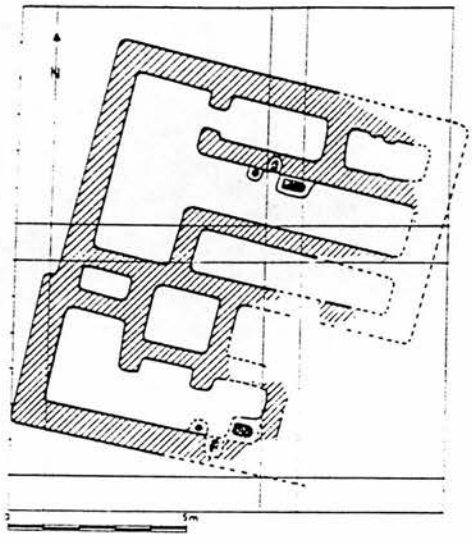
(taken from Akkermans et al. 1981: fig. 5)

Illustration 126: Bouqras. Period 4. house 12.

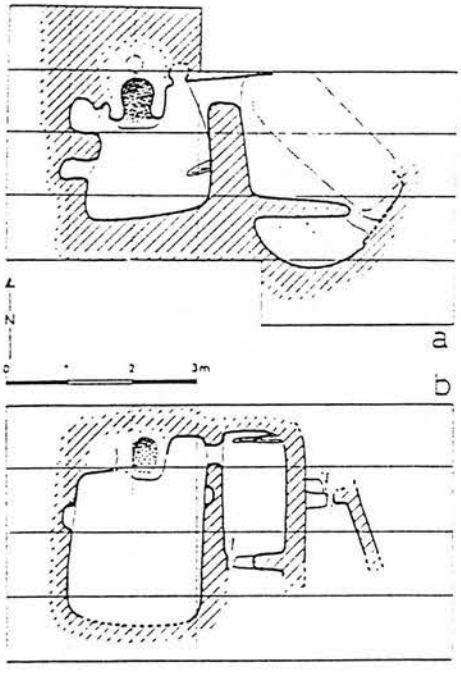


(taken from Akkermans et al. 1981: fig. 11)

Illustration 127: El Kowm 2, Period 4, Level A IV, structures: I, IX and XII.

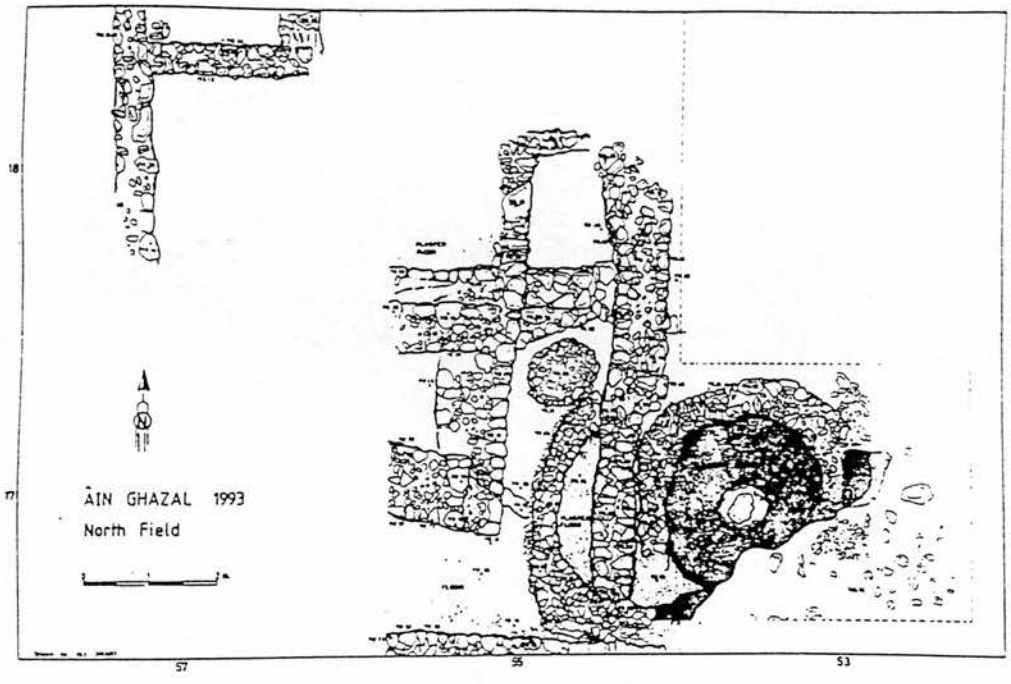


(taken from Stordeur 1989: fig. 3: str. IX and XII)



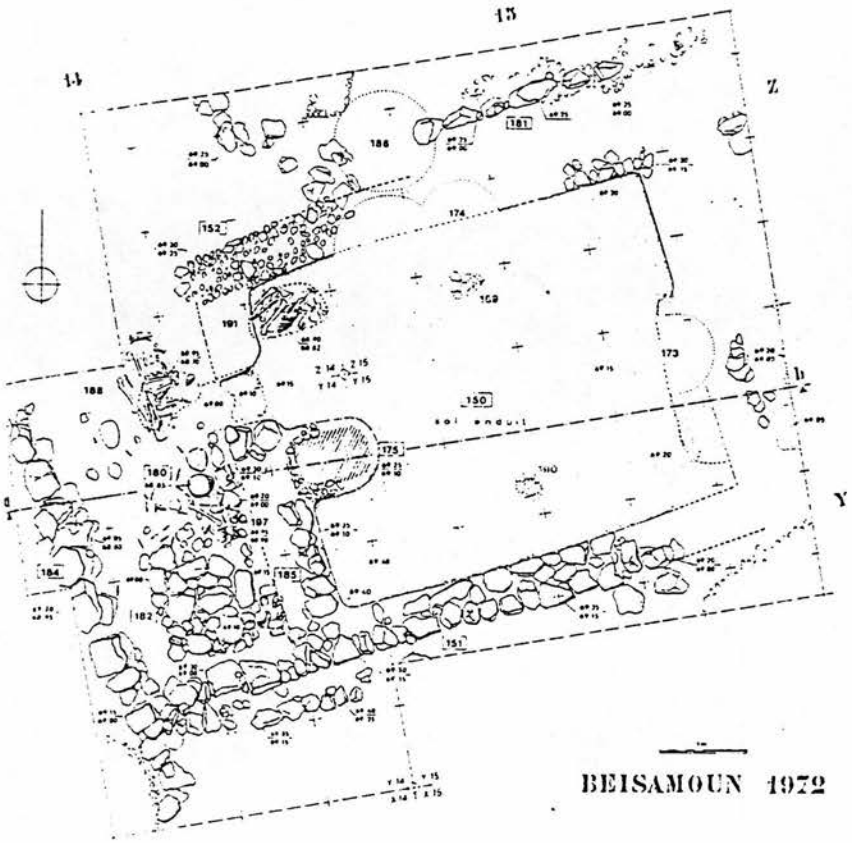
(taken from Stordeur 1989: fig. 2: str. I)

Illustration 128: 'Ain Ghazal, Period 4, structure in the North Field.



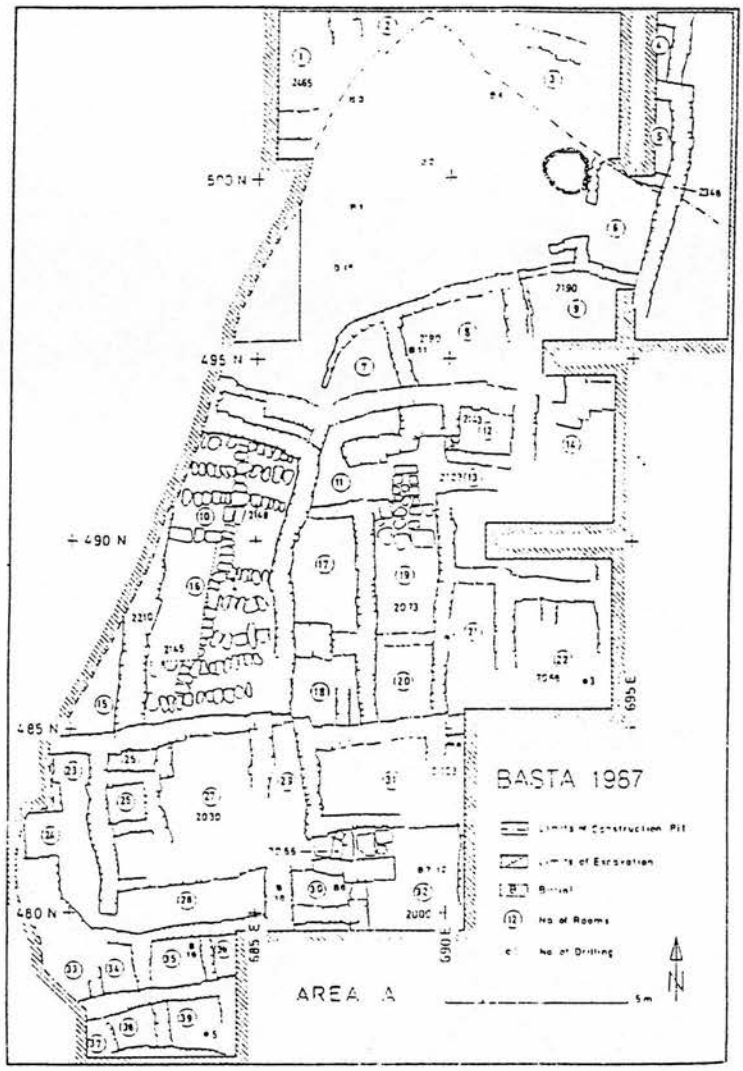
(taken from Rollefson 1994: fig. 8)

Illustration 129: Beisamoun, Period 4, level 1.



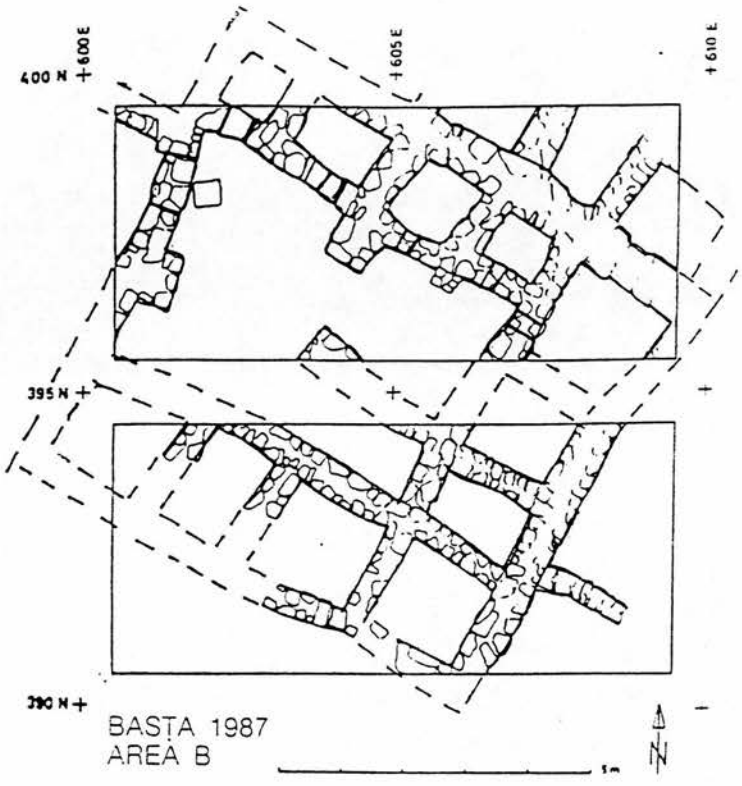
(taken from Lechevallier 1978: fig. 3)

Illustration 130: Basta, Area A Period 4.



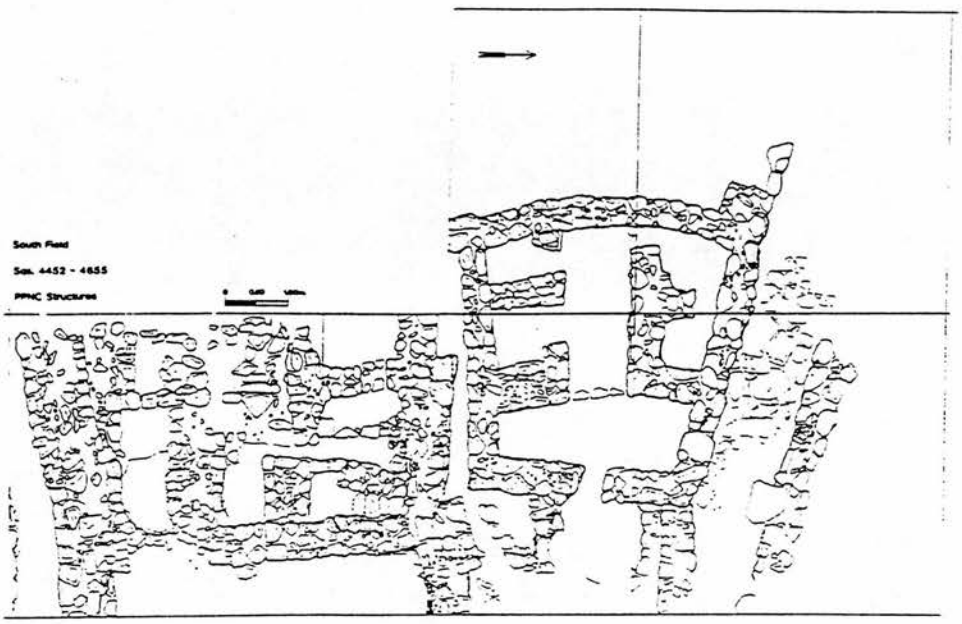
(taken from Nissen et al. 1987: fig. 4)

Illustration 131: Basta. Period 4, Area B.



(taken from Nissen et al. 1987: fig. 7)

Illustration 132: 'Ain Ghazal, Period 5, structure in the South Field.



(taken from Rollefson 1992: fig. 5)

Illustration 133: Neolithic sites in Levant.

sites	period	publication	excavation	references
Hatoula	2	final	soundings	Lechevallier 1985
Gilgal I	2	report	extensive	Noy 1989, Noy *et al.* 1980
Netiv Hagdud	2	report	extensive	Bar-Yosef *et al.* 1991, Bar Yosef 1980
Jericho	2,3	final	soundings	Kenyon 1981
Nahal Oren	2, 3	report	extensive	Stekelis and Yizraely 1963, Noy *et al.* 1973
Mureybet	2, 3,	report	extensive?	Van Loon 1968, Cauvin 1977, Aurenche 1980
Yiftahel	3	report	sounding	Garfinkel 1987
'Ain Ghazal	3, 4, 5, 6	report	soundings	Rollefson *et al.* 1992
Beidha	3	report	extensive	Kirkbride 1968, Byrd 1994
Tell Abu Hureyra	3, 4, 5	report	soundings	Moore *et al.* 1975
Munhata	3, 6, 7, 8	report	extensive?	Perrot 1964, 1966, 1967
El Kowm	4	final	soundings	Dornemann 1986, Stordeur 1989
Beisamoun	4	final	soundings	Lechevallier 1978
Abou Gosh	4	final	soundings	Lechevallier 1978
Bouqras	4	final?	extensive	Akkermans *et al.* 1981
Basta	4	report	soundings?	Nissen *et al.* 1987
Ras Shamra	4, 5	report	soundings	Contenson *et al.* 1992, Contenson 1977
Tell Ramad	4, 5	report	sounding	Contenson 1969, 1971
Byblos	5, 6	report	sounding	Dunand 1960, 1961, 1973

Illustration 134: Description of the archaeological evidence.

	size	nature of habitation
Period 2 - PPNA		
Mureybet 1(IX-XVII)	c. 3 ha?	excavated by van Loon, oval and rectangular str., stone foundations
Mureybet 2 (IIIA,B)	(c. 3 ha?)	excavated by Cauvin, round str., well preserved
Hatoula	0.2 - 0.3 ha	poor preservation, 'huts', stone foundations/ floors not preserved
Gilgal I	1-0.5 ha	not very well preserved, round str., stone? foundations, selective info.
Netiv Hagdud	1.5 ha	poorly preserved stone foundations visible from surface, oval and circular str., in some cases with plastered floors
Jericho	c.2.5 ha?	well preserved but only partially excavated str. with 2 rooms, also communal str.: 'defensive' wall, and silos (?)
Nahal Oren	0.05 ha	relatively well preserved, 'huts', stone foundations, limited info. well preserved but partly excavated, (indications for burials within structures by later excavation: Noy 1973)
Period 3 - PPNB		
Mureybet	2-3 ha	well preserved, little revealed, rectangular str. with long narrow rooms
Tell Abu Hureyra	?	early aceramic rectangular multiroomed str., many layers
Jericho	4 ha	well preserved but only partly revealed str., info. by layers many adjacent rooms, and courtyards
Munhata	?	rather well preserved, both circular and rectangular str.
Yiftahel	1.5 ha	rather well preserved, one rectangular room, surrounded by 2 courtyards
'Ain Ghazal	4-5 ha	well preserved, rectangular rooms, multiperiod site, lots of later disturbances, a lot of rebuilding activities (Rollefson 1988)
Beidha	0.5 ha ?	well preserved, variety of architectural types: round and rectangular subdivided in several levels, with different structural types in each one: level VI: round, Level V-IV: rectangular monocellurar, level III-II: large room str. and corridor str.(Kirkbride 1966). Byrd (1994) identifies them as separate phases: Phase A, B, and C
Period 4 - late PPNB		
Tell Abu Hureyra	11,5 ha	well preserved, clusters of buildings made of mudbrick, later aceramic: best known
Bouqras	2,7 ha	later disturbances but relatively well preserved, mudbrick walls, clear layout, str. with many rooms and an enclosed courtyard.
(El Kowm I)	?	poorly preserved : phase A and phase B : small sounding: 'defensive wall' and red plastered walls and floors.
El Kowm 2	c. 0.5 ha	well preserved: two types of architecture: a) symmetrical T type, and b) small irregular rooms in two levels

(Ras Shamra)	8 ha	very frag. info./ level VC (related to Ramad I), stone rectilinear str.
'Ain Ghazal	10 ha	well preserved, small size of sample, different types of architecture: rectangular, apsidal, circular (Rollefson: 1994)
Beisamoun	10 - 12 ha	poorly preserved, stone / *pisé* rectangular str.
Abou Gosh	0.2 ha	poorly preserved, rectilinear walls, disturbed by Byzantine pits
Basta	14 ha	rather disturbed, difficult to differentiate units, two sectors with different architectural types: a big complex of roomed with channels, and an area of smaller, free standing(?) units
Tell Ramad	2 ha	level I: half-buried huts made of *pisé*, with ovens and shallow basins; level II: rectilinear architecture made of stone and mudbrick built around large courtyards (Singh 1974: 49-50)
Period 5		
'Ain Ghazal	12-13 ha	well preserved, small rectangular rooms with a corridor in the middle (basements?) (Rollefson *et al.* 1992: 449)
Tell Abu Hureyra	5-6 ha	eroded, mudbrick str. and numerous pits / ceramic Neolithic
El Kowm I	?	phase C and D: multiroomed rectangular str., limited exposure
(El Kowm 2)	?	pits cut into earlier layers
(Ras Shamra)(Vb)	8 ha	very frag. info., small sample, massive rectilinear stone foundations, ceramics similar to Amuq A (de Contenson 1982: 61-62)
(Munhata)	?	pit dwellings only
(Jericho)	?	pit dwellings only (Kenyon 1981: 116)
(Tell Ramad) III	1 ha	settlement shifted to the west(?), no complete str., only frag. of walls and platforms of stones (Singh 1974: 51) / lack of solid architecture and many deep pits
Byblos	1 ha	phase known as Neolithique Ancient, rectangular str.
Period 6		
'Ain Ghazal	?	poorly preserved (Yarmukian)
(Byblos)	?	Neolithique Ancient
(Ras Shamra) (Va)	?	frag. info. / related to Amuq B, Abu Hureyra ceramic Neolithic, Byblos; small rectangular stone str. with plastered floors, built close together (de Contenson 1982: 62)
(Jericho)	?	traces of architecture and few hearths (Kenyon 1954: 45-63)

Illustration 135 : Information about the layout of the settlements.

	boundaries	layout	non domestic buildings	communal space
Period 2 - PPNA				
Mureybet 1(IX-XVII)	_	?	_	_
Mureybet 2 (IIIA,B)	_	a	_	_
Hatoula	_	f		_
Gilgal I	_	f?	?	_
Netiv Hagdud	_	f, a	?	_
Jericho	surrounding wall	?	_	_
Nahal Oren	_	f	_	_
Period 3 - PPNB				
Mureybet	_	?	_	_
Tell Abu Hureyra	_	?	_	_
Jericho	_	f?	?	courtyards
Munhata	_	f?	_	courtyards/lanes
Yiftahel	_	f	_	courtyards
'Ain Ghazal	_	f?	_	_
Beidha				
phase A	surrounding wall	a	?	courtyards
phase B	surrounding wall	f	?	courtyards
phase C	surrounding wall	a	large building	courtyards
Period 4 - late PPNB				
Tell Abu Hureyra	_	f?	?	alleys/courts
Bouqras	_	f	_	courts?/alleys
El Kowm 2	?	f?	_	?
'Ain Ghazal	_	?	?	_
Beisamoun	_	f?	_	alleys/open areas
Abou Gosh	?	f?	_	?
Basta	_	f/?	_	_
Tell Ramad				
level I	_	f?	_	?
level II	_	?	_	lanes/yards
Period 5				
'Ain Ghazal	courtyard wall?	a?	_	_
'Tell Abu Hureyra	_	?	_	_
Byblos	_	f?	_	_
Period 6				
'Ain Ghazal	_	?	?	_

note: layout : f: for free standing structures, a: for adjacent

Illustration 136: Structural information.

	complete units	shape	material	segmentation	type of partition	access	range of size
Period 2 - PPNA							
Mureybet 1(IX-XVII)	_	rectilinear	stone/?	s/a?	Bd?	a?/c?	?
Mureybet 2 (IIIA,B)	*	round	stone/*pisé*	s	Bd	a/c?	2.5-6m diam(?)
Hatoula	_	oval	stone/ *pisé*?	_	A	?	16 sq.m. (1)
Gilgal I	*	round	stone/?	?	A?	a?	?
Netiv Hagdud	*	oval/circ.	stone/?	s, a	A, Bc	a	8-9m (length), 4-5m (diameter)(?)
Jericho	_	round	mudbrick	a?	A?, Bc?	?	?
Nahal Oren	*	elliptical	stone/?	_	A	a	9-15 sq.m. (14)
Period 3 - PPNB							
Mureybet	_	rectangular	?	s?	Bd	?	?
Tell Abu Hureyra		rectangular	mud brick	s?	Bd?	?	?
Jericho	_	rectangular	?	s, a?	Bd?, Be	a	?
Munhata	*	rect., circ.	stone/brick	s	A, Bd	?	rect.: 16.8 sq.m./circ.: 20m diam
Yiftahel	*	rectangular	mudbrick	_	A	b	30 sq.m. (1)
'Ain Ghazal	_	rectangular	stone/ *pisé*	s?	Bc, Bd	a?	10 sq.m. (rooms)
Beidha							
phase A	*	oval	posts/?	a	A	a, b	1,7-32,6 sq.m.(18)
phase B	*	curv., rect.	stone/?	_	A	a	3.8-38.4 sq.m.(11)
phase C	*	rectangular	stone/?	s	A? ,Bc, Cb	a	3.1-104.9 sq.m.(16)
Period 4 - late PPNB							
Tell Abu Hureyra	?	rectangular	mudbrick	s/a?	Bd	a?	6 sq.m.(rooms)
Bouqras	*	rectangular	mudbrick	s	Bd	a/c	50-105 sq.m. (?)
El Kowm 2	*	rect., irreg.	stone/brick	s	Bd, Bd/Cb	a	rect.:110 sq.m.(1)
'Ain Ghazal	_	rect., circ., apsidal	stone	s/a?	Bd	a?	4 sq.m. (1 room)
Beisamoun	*	rectangular	stone/brick?	s	Bc	a?	30 - 50 sq.m. (?)
Abou Gosh	_	rectangular	stone	s	Bd, Cb?	?	36 - 60 sq.m. (2)
Basta	*	rectilinear	stone	a?/s?	Bd/Cb/Cc	a?	?

Tell Ramad								
	level I	?	round?	*pisé*	?	A?	?	?
	level II	?	rectilinear	stone/brick	?	A?	?	?
Period 5								
'Ain Ghazal (PPNC)		*	rectangular	stone	s?	Bd	?	?
Tell Abu Hureyra		?	rectangular	mudbrick	?	?	?	?
Byblos		_	rectangular	stone	a?	A?	a?	?
Period 6								
'Ain Ghazal		_	apsidal circ., rect.	stone	?	?	?	?

note: segmentation: s: subtractive, a: agglutinative; types of partition: A: no partition, B: horizontal partitions (Ba: partition wall, Bb: ridge, Bc: one room, Bd: multiple rooms, Be: three rooms-megaroid type), C: vertical partitions (Ca: buttresses, Cb: basement, Cc: 'staircase', second floor?); access: a: one entrance, b: more than one entrance, c: court included in the house plan, range of size : the number in parenthesis refers to the number of structures on which the estimates are made. [see also app. I]

Illustration 137: Features found inside the structures.

	hearths	platforms	fixed containers	posts	pits	burials	other
Period 2 - PPNA							
Mureybet 1	hearth	–	bin	yes	–	b?	jaw in wall
Mureybet 2	fireplace	platform	enclosed areas?	yes	–	a?	wall painting
Hatoula	fireplace?	–	–	–	–	a?	
Gilgal I	–	–	silo	?	?	–	
Netiv Hagdud	fireplaces	–	–	–	–	b	
Jericho	–	–	–	–	–	–	
Nahal Oren	hearths	–	–	?	–	?	
Period 3 - PPNB							
Mureybet	–	–	–	–	–	a, b	skulls?
Tell Abu Hureyra	?	?	?	?	?	?	
Jericho	hearths?	pavings	bins	yes	?	a, b	pillar in wall
Munhata	hearths	benches	niches	yes	?	–	
Yiftahel	–	–	silo, basin?	yes	–	–	
'Ain Ghazal	hearth	–	niches, bins	yes	–	a, b	
Beidha							
phase A	hearths	plat., slabs	–	yes	–	?	
phase B	hearths	platforms	–	–	–	–	
phase C	hearths	plat., slabs	–	?	–	–	
Period 4 - late PPNB							
Tell Abu Hureyra	hearths	platforms	bins	–	–	a, b?	
Bouqras	hearth/oven	–	bin	–	–	a	
El Kowm 2	hearths	?	niches	–	–	–	
'Ain Ghazal	–	–	–	–	–	?	
Beisamoun	hearths	paved area	basin?	yes	–	b	
Abou Gosh	–	paved area?	–	–	–	a	
Basta	oven?	–	stationary vessel	–	–	?	
Tell Ramad							

	level I	hearths	platforms	basins	–	–	?
	level II	?	?	?	?	?	b?/skull cult
Period 5							
'Ain Ghazal		–	–	–	–	–	?
Tell Abu Hureyra		?	?	?	?	?	?
Byblos		?	?	?	?	?	–
Period 6							
'Ain Ghazal		–	–	–	–	–	–

Note: burials: a: burials, a' secondary burials, b: plastered skulls.

Illustration 138: Features found outside.

	hearths	platforms	fixed containers	pits	posts	burials
Period 2 - PPNA						
Mureybet 1(IX-XVIII)	–	paved area	–	yes	–	–
Mureybet 2 (IIIA, B)	firepits	paved area	–	–	–	a?
Hatoula	–	–	–	yes	–	a?
Gilgal I	?	?	?	?	?	?
Netiv Hagdud	fireplace	–	silos?	–	–	a
Jericho	–	–	silos	–	–	–
Nahal Oren	–	–	–	–	–	–
Period 3 - PPNB						
Mureybet	–	–	–	–	–	–
Tell Abu Hureyra	?	?	?	?	?	?
Jericho	?	?	bins	?	?	?
Munhata	hearths	pavings	basins	yes	?	?
Yiftahel	firepits	anvils	–	yes	–	–
'Ain Ghazal	?	?	?	?	?	a, b?
Beidha						
phase A	fireplaces	–	–	–	–	?
phase B	fireplaces	–	–	–	–	?
phase C	fireplaces	–	small chambers	yes	–	?
Period 4-late PPNB						
Tell Abu Hureyra	?	?	?	?	?	a, b?
Bouqras	?	?	?	?	?	?
El Kowm 2	?	?	?	?	?	?
'Ain Ghazal	?	?	?	?	?	?
Beisamoun	hearths	?	–	–	–	a, b?
Abou Gosh	fire pits	paving	basin	yes	–	a?
Basta	–	–	–	–	–	a?
Tell Ramad						
level I	?	?	?	?	?	b?/skull cult
level II	hearth, oven	paved area	silos?	–	?	?
Period 5						
'Ain Ghazal	–	–	–	–	–	–
Tell Abu Hureyra	?	?	?	yes	?	?
Byblos	?	?	?	?	?	a
Period 6						
'Ain Ghazal	–	–	–	–	–	–

note: burials: a: burials, a': skull/secondary burial, b: plastered skulls.

Illustration 139: Comments on the nature of the contextual information.

	nature of deposition (high / low)
Period 2 - PPNA	
Mureybet 1(IX-XVII)	many cases of collapsed superstructure/ destructions, rather low deposition
Mureybet 2 (IIIA, B)	rather low, collapse of superstructures, and 'cache' of tools (str. XLVII)
Hatoula	rather high deposition but eroded; no floors, distribution of finds by layers within each str.; 3 layers identified: construction, occupation, end of occupation
Gilgal I	rather high, information for at least two structures: 11 and 3; 'in every house artefacts were either littered on the floor or gathered in heaps' (Noy 1989:12), no specific info. for each floor, commonest feature: cup-marked stones, no info. about exteriors, str. 11 the only one with 2 layers
Netiv Hagdud	deposition varies: loc.8 rather high, with many finds and 3 frag. skulls, loc. 1001 burned with very little finds (Bar Yosef 1991), in general selective info., commonest feature: cup-marked stones
Jericho	description of finds by trench and layer, limited info., deposition rather low
Nahal Oren	selective info., no information about exteriors, most of str. with two floors, rather high deposition of flint industry, cup-marked stones quite common
Period 3 - PPNB	
Mureybet (IV A, B)	rather low, frag. info., indications of 'cult of skulls' :'skulls on top of red plastered lamps serving as pedestals' (Cauvin 1980: 32)
Tell Abu Hureyra	no specific information for each subphase, in general deposition seems high: collections of objects *in situ* and associations of finds included workshop debris, clusters of artefacts on floors ands caches of animal bones with discarded artefacts (usually in the fill of yards or abandoned buildings, Moore 1975:64) / indications of chipping floors inside and outside str. and several other chipping floors with fresh flint waste elsewhere on the site(?) (ibid.: 65)
Jericho	deposition rather low, info. by layer, not floor, dense occupation
Munhata	rather high; circular str.: at the centre exceptional number of animal bones suggesting that it was a courtyard (Perrot 1964:327); rectangular str.: considerable number of tools (stone vases, pestles, flints etc.), (ibid.: 326)
Yiftahel	high concentration of working activities outside and storage inside the str.
'Ain Ghazal	limited and frag. info., deposition rather low, many renovations, plastered skulls and caches with human statuary in pits but not related to living floors
Beidha	
phase A	high, many burned str. with *in situ* finds, no info. for specific str. (Byrd 1994:647)
phase B	poor preservation, no burned str., absence of *in situ* finds (ibid.: 652)
phase C	high deposition in 'corridor' str. but low in 'large' str. (ibid.: 655-656)
Period 4 - late PPNB	
Tell Abu Hureyra	clean floors but high depisition between buildings (Moore 1975)
Bouqras	low, floors devoid of occupational trash, most of the objects located in the fill

El Kowm	rather low, very few cases of *in situ* artefacts (Stordeur 1989:102-103)
'Ain Ghazal	small rooms containing seeds, possible indication of storage in specific rooms
Beisamoun	little info., one case with high deposition: str. in west sector, level 1
Abou Gosh	rather eroded, little info.
Basta	low, only one case (room 9) with two grinding slabs (Nissen *et al.* 1987:91)
Tell Ramad	no contextual info., in level II along with other features many grinding stones (de Contenson 1971: 282), also note the difference in the deposition of skulls: level I: 'plastered skulls clustered in nests close to the *pisé* huts' (ibid.: 281), level II: 'skull cult...appears to have survived inside the houses' (ibid.: 282)
Period 5	
'Ain Ghazal	cell like rooms, not much depositional info., generally seems rather low
Tell Abu Hureyra	high deposition, no specific info.
Byblos	? little info.
Period 6	
'Ain Ghazal	? little info.

Illustration 140: Finds associated with particular floors.

	layer	structure	types of finds
Period 2 - PPNA			
Mureybet 1	level XVI	str. 19	open area related to str. contained hearth, bin, quern
Mureybet 2	phase III	str. XLVII	sickles, scrapers, flakes, pointed tools made of bones
Hatoula	late	str. II	high concentration of grinding stones/pestles, and 1 cup-marked stone
Gilgal I		str. 11	flakes, blades, sickle blades, chisels, hammer, awls, polished stone bowl, mortar, 4 figurines, silo with large amount of oat, barley, seeds, acorn etc.
		str. 3	grinding tools, polishers, bones, flints
Netiv Hagdud		loc. 55	partly excavated, cache of 'shaft straighteners', grinding bowls
		loc. 8	partition wall with two rooms: first with 1 cup-stone second with 2; + pounding implements (70 total)
		loc. 1001	burned house, with very few finds
Jericho			–
Nahal Oren		str. 9	high concentration of flints
		str. 10	high concentration of flints
Period 3 - PPNB			
Mureybet			–
Tell Abu Hureyra			–
Nahal Oren			–
Jericho			–
Yiftahel		str. 710	seeds concentrated in 2 corners: 2000 horsebean and 1,400,000 lentil seeds
		str. 700	(outside area) anvils and further north 25 hearths.
		str. 720	(outside area) considerable number of grinding stones
'Ain Ghazal	MPPNB	str. 4	11 grinding stones (in semi-circular enclosed area)
Beidha			–
Period 4 - late PPNB			
Tell Abu Hureyra			–
'Ain Ghazal		small rooms	hundreds of charred legumes in small rooms, indication of specific functions (Rollefson *et al.* 1992: 449)
Beisamoun			–
Abou Gosh			–
Bouqras			–

Basta		–
Ras Shamra		–
Tell Ramad		–
Period 5		
'Ain Ghazal		–
Tell Abu Hureyra		–
Byblos		–
Period 6		
'Ain Ghazal	apsidal str.	only Yarmoukian fineware was found inside, indication that the structure was used for a special purpose (Rollefson *et al.* 1992: 451)

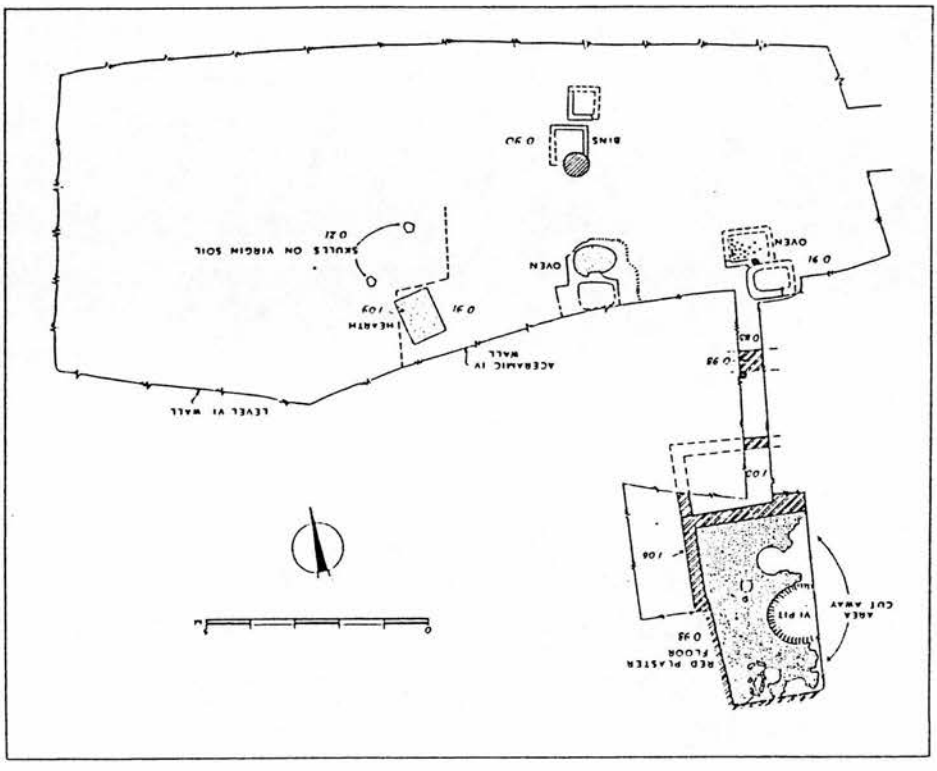
Illustration 141: The recording system and the presentation of the material in each publication.

	architecture		stratigraphy			description of architecture			description of finds		
	complete units	preservation	by phase	by structure	by floor	by phase	by structure	by floor	by layer	by structure	by floor
Period 2 - PPNA											
Mureybet 1	–	a	*	*	–	*					
Mureybet 2	*	a	*	*	–	*	*	–	*	*	–
Hatoula	–	b	*	*	–	*	*	–	*	–	–
Gilgal I	*	b	*	selective	–	*	selective	–	*	–	–
Netiv Hagdud	*	b	*	–	–	*	selective	–	*	–	–
Jericho	–	a									
Nahal Oren	*	a	*	–	–	*	selective	–	*	selective	–
Period 3 - PPNB											
Mureybet	–	b	*	*	–	*	*	–	*	*	–
Tell Abu Hureyra	?	b	*	–	–	*	–	–	*	–	–
Jericho	–	a	*	*	–	*	*	–	*	*	–
Munhata	*	a	*		–	*	*	–	*		–
Yiftahel	*	a	*	–	–	*	*	–	*	–	–
'Ain Ghazal	–	a	*	*	–	*	*	–	*	*	–
Beidha	*	a	*		–	*		–	*	selective	–
				–	–		–	–	*	selective	–
Period 4-late PPNB											
Tell Abu Hureyra	?	a	*	–	–	*	–	–	*	–	–
Bouqras	*	a	*	–	–	*	selective	–	–	–	–
El Kowm	*	a	*	*	–	*	*	–	*	–	–
'Ain Ghazal	–	a	*		–	*	*	–	*	selective	–
Beisamoun	*	a	*	*	–	*	*	–	*	selective	–
Abou Gosh	–	b	*	*	–	*	*	–	*		
Basta	*	b	*	selective	–	*	selective	–	*	–	–
Tell Ramad	?	b	*	–	–	*	–	–	*	–	–
Period 5											
'Ain Ghazal	*	b	*	selective	–	*	selective	–	*		
Tell Abu Hureyra	?	?	*	–	–	*	–	–	*	–	–

Ras Shamra	–	b	*	–	–	*	–	–	*	–	–
Byblos	–	b	*	–	–	*	–	–	*	–	–
Period 6											
'Ain Ghazal	–	b	*	selective	–	*	selective	–	*	–	–
Byblos	–	b	*	–	–	*	–	–	*	–	–

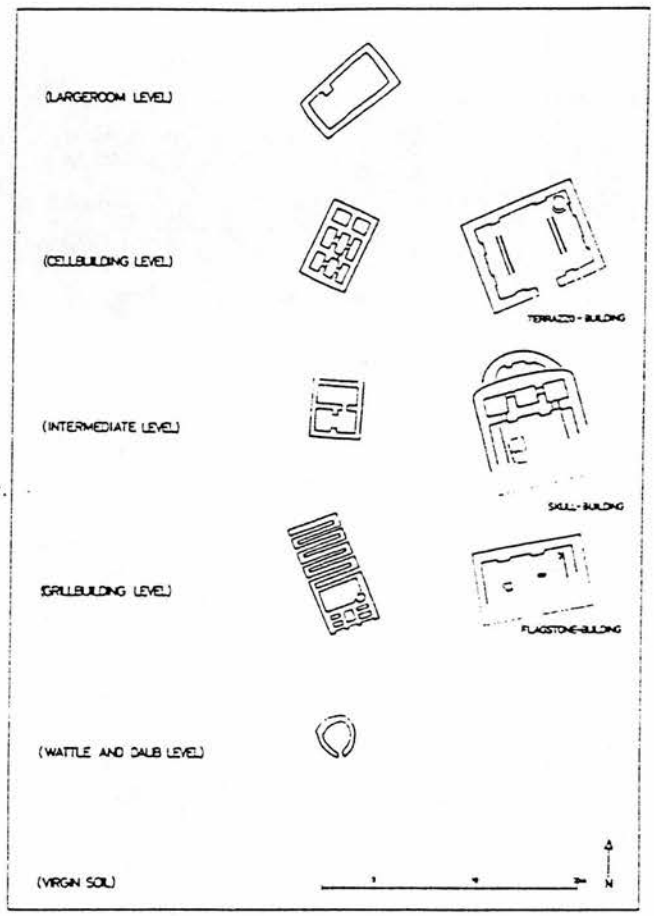
Note: preservation: a: well preserved, b: poorly preserved, walls or floors are difficult to identify (for details see ill. 134)

Illustration 142: Hacilar. Period 3, aceramic. Level V.



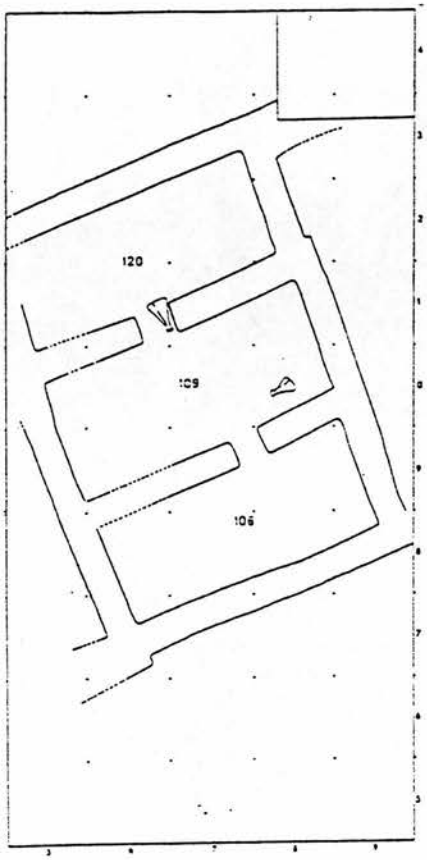
(taken from Mellaart 1970: fig. 4)

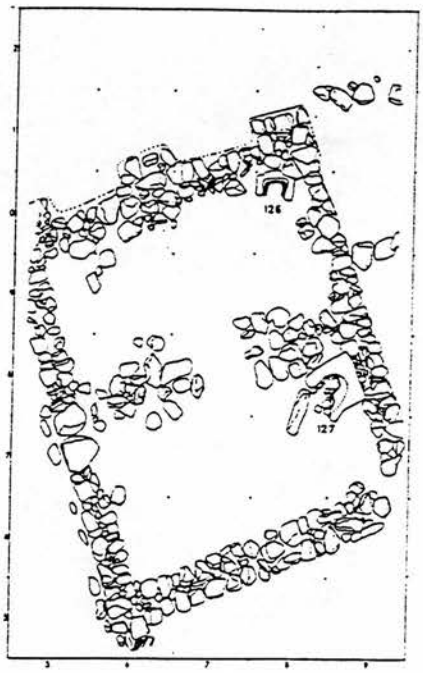
Illustration 143: Çayönü. Period 3. table showing the main structural types on the site.



(taken from Schirmer 1988: fig. 1)

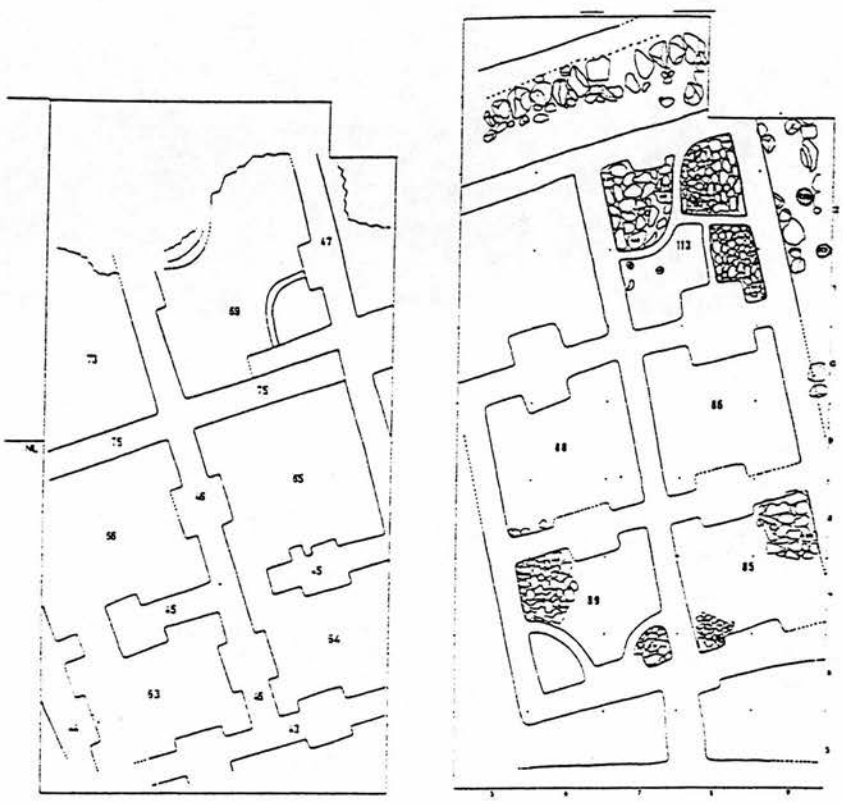
Illustration 144: Cafer Höyük, Period 3, levels X and XII.





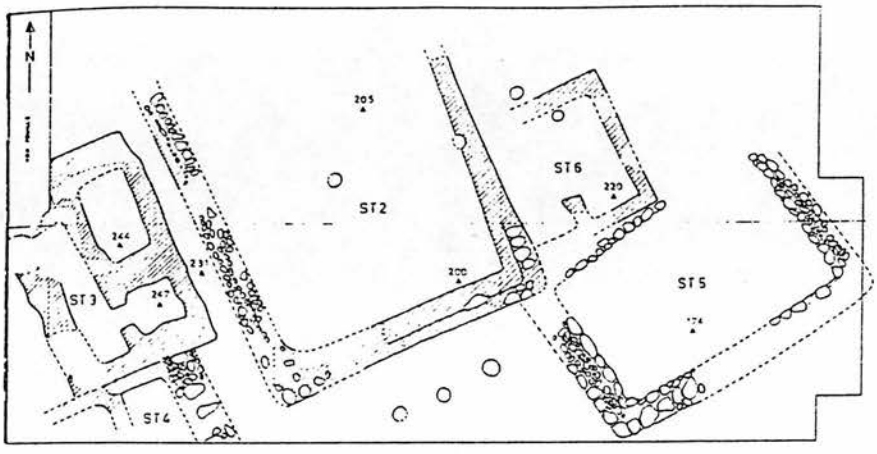
(taken from Cauvin 1989: fig. 6 and 7)

Illustration 145: Cafer Höyük, Period 3, levels VI, VIII.



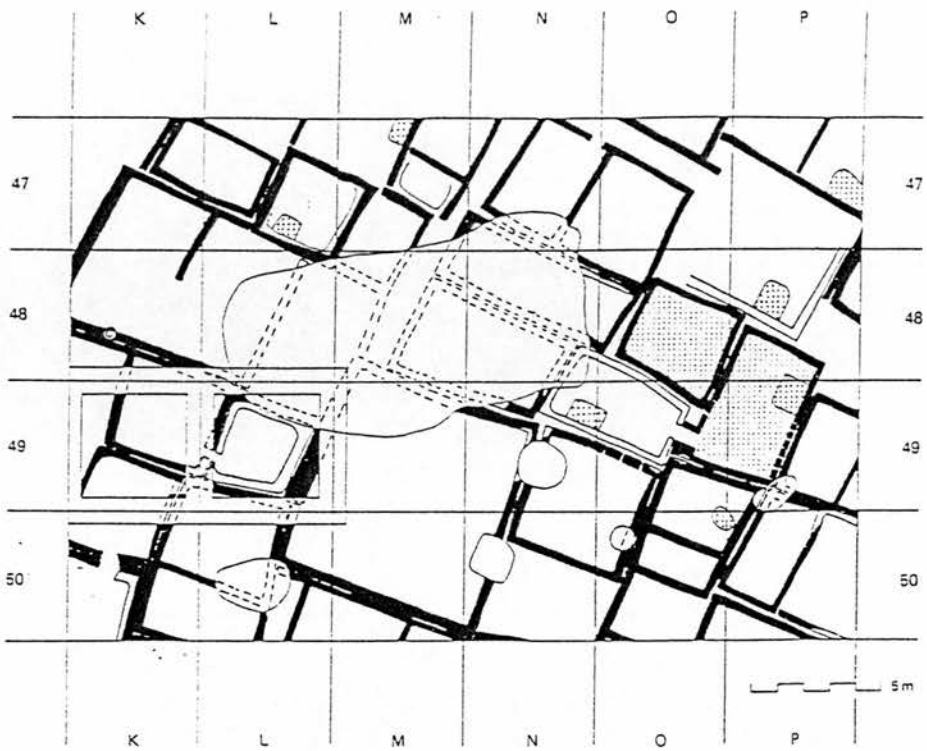
(taken from Cauvin 1989: fig. 3 and 5)

Illustration 146: Cafer Höyük, Period 3, west sector, structures 2 and 6.



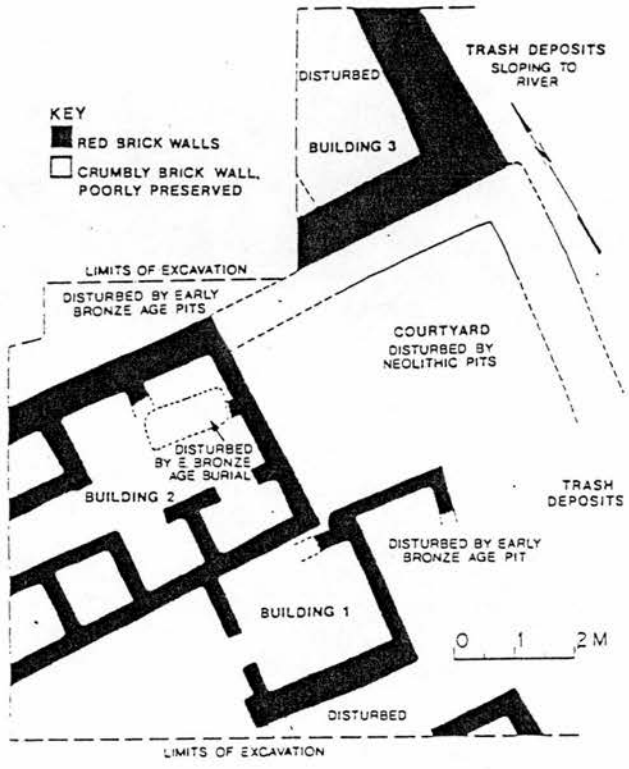
(taken from Aurenche et al. 1985: fig. 12)

Illustration 147: Can Hasan III, Period 4.



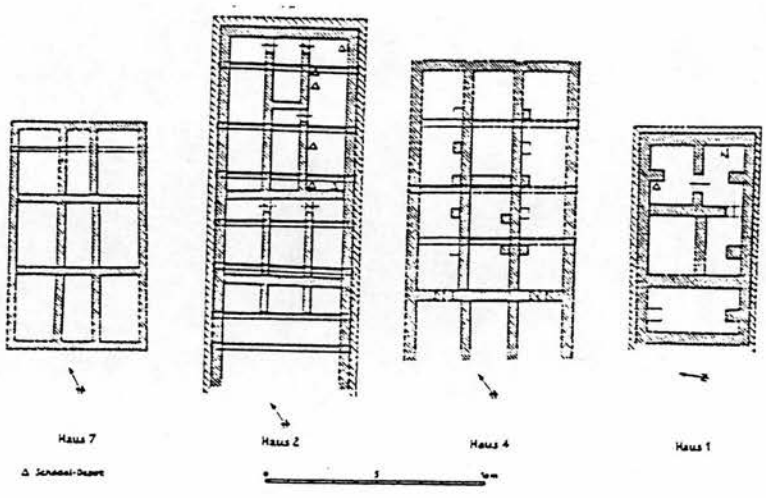
(taken from French 1972: fig. 4)

Illustration 148: Gritille. Period 4, main excavation area, phase B.



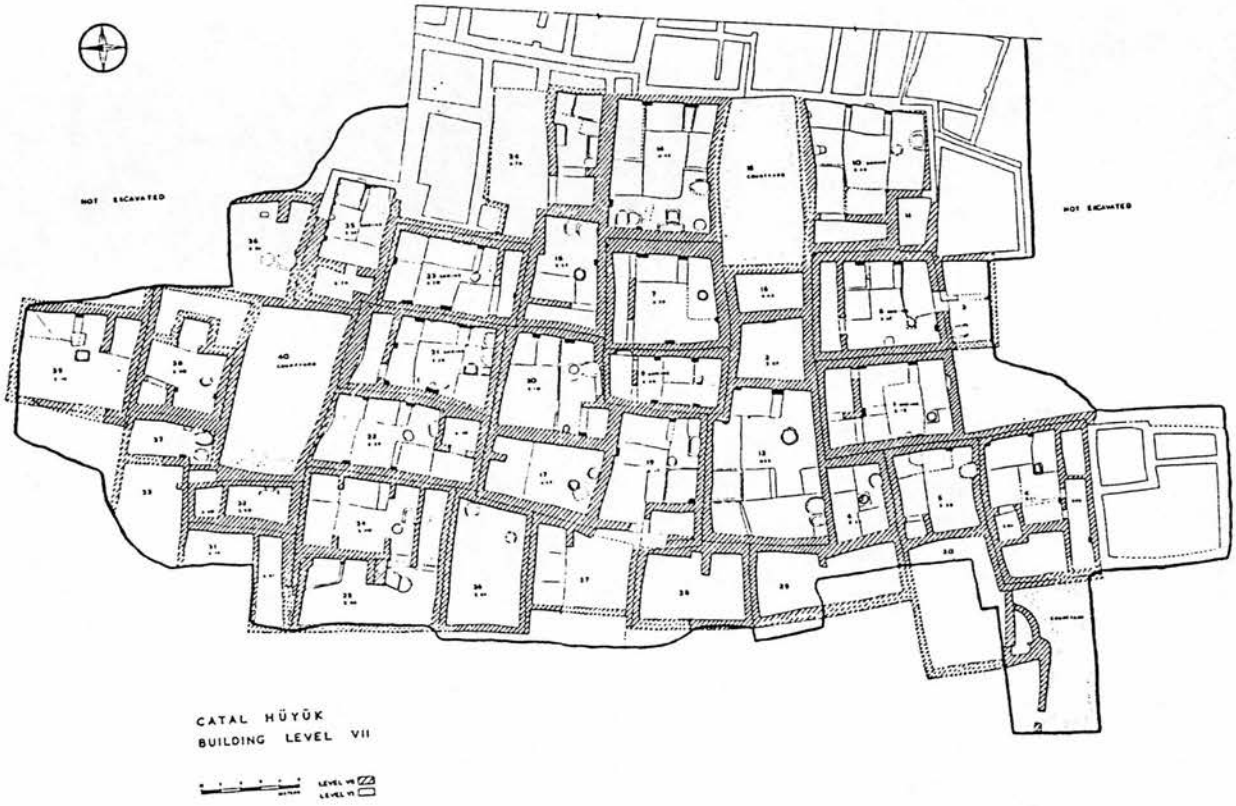
(taken from Voigt 1988: fig. 8)

Illustration 149: Nevalla Çori, Period 4, Levels 1-3.



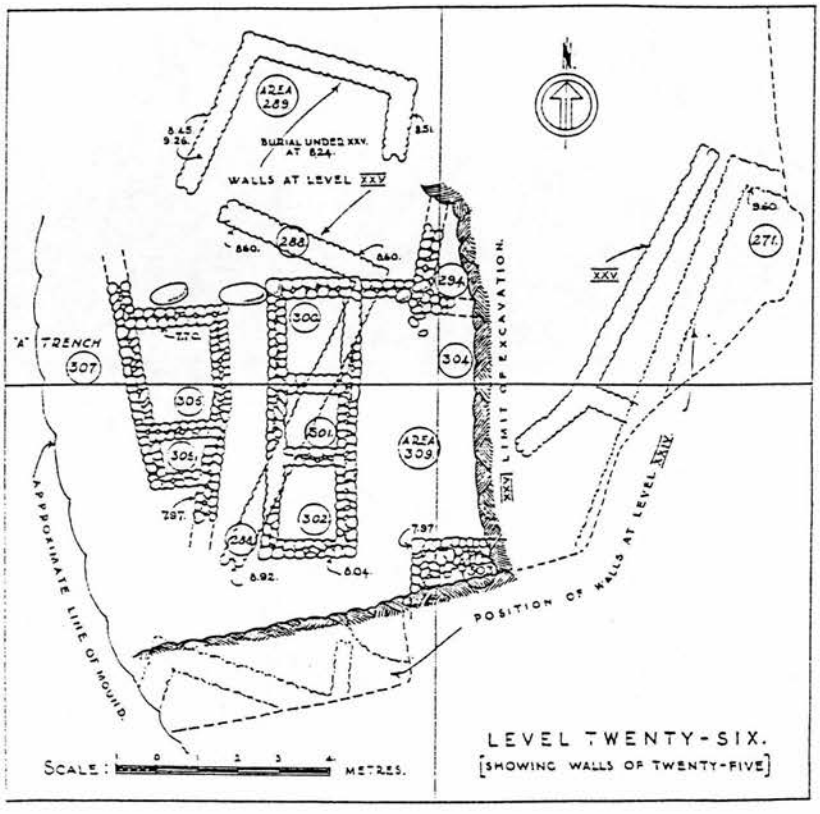
(taken from Hauptmann 1988: fig. 5)

Illustration 150: Çatal Höyük, Period 5, Level VII.



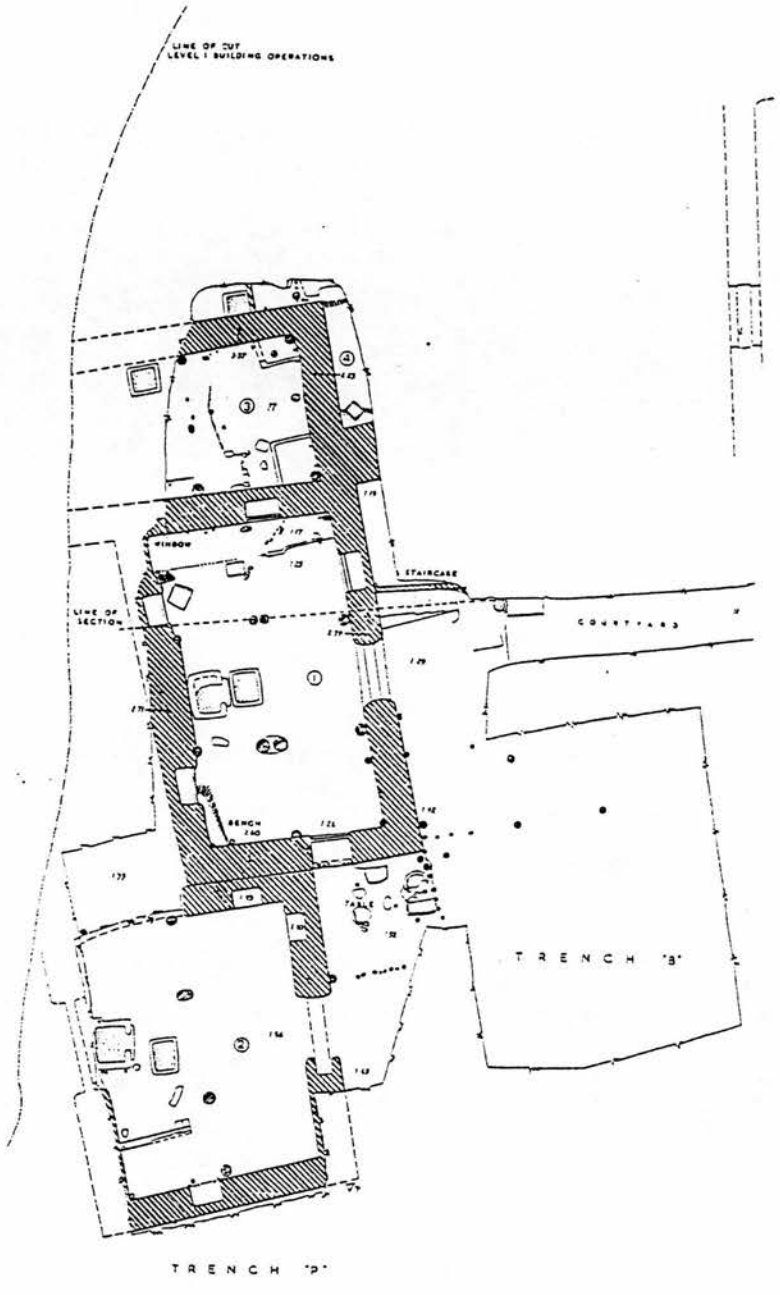
(taken from Mellaart 1964: fig. 11)

Illustration 151: Mersin. Period 5. Levels XXVI-XXV.



(taken from Garstang 1953: fig. 12)

Illustration 152: Hacilar. Period 6, level VI, trenches P and B.



(taken from Mellaart 1970: fig. 7)

Illustration 153: Neolithic sites in Anatolia.

sites	period	publication	excavation	references
Haçilar	3, 6	final publication	extensive	Mellaart 1970
Çayönü	3	reports	extensive	Schirmer 1990
Cafer Höyük	3	reports	extensive	Aurenche *et al.*1985, Cauvin, J. 1989
Can Hasan III	4	reports	extensive	French 1972
Suberde	4	reports	soundings	Bordaz 1965, 1966, 1968
Gritille	4	reports	soundings	Voigt *et al.* 1981, 1985, 1988
Nevalla Çori	4	reports	soundings	Hauptmann 1988
Çatal Höyük	4, 5, 6	reports	extensive	Mellaart 1962, 1963, 1964, 1966
Mersin	5, 6	final publication	soundings	Garstang 1953

Illustration 154: Description of the archaeological evidence.

	size	nature of habitation
Period 3 - 'PPNB'		
Haçilar / Aceramic	?	not very well preserved, mudbrick walls, few stone foundations, courtyard, 7 subphases
Çayönü	2 ha-1.5 ha	well preserved, walls of stone and mudbrick, at least 5 subphases, each with different type of str. and many layers of rebuilding: i) wattle and daub, ii) grill plan, iii) intermediate level, iv) cell-plan level, v) large room level; in general long periods of occupation
Cafer Höyük	c. 0.4 ha	well preserved, stone foundations, mudbrick walls, at least 3 types of str.: megaroid, cell plan, broad room plan. 2 sectors: east and west, and 3 phases identified: in the east sector: early phase: levels XIII-IX, middle : VIII-V, and late: IV-I, in the west sector information mainly comes from the latest phase
Period 4 - 'late PPNB'		
Çatal Höyük(XII-IX)	?	poor preservation, limited excavation, not much info. available, mudbick str.
Can Hasan III	c. 1 ha	well preserved, mudbrick walls, 7 aceramic layers, not much info. available
Suberde	c. 0.5 ha	not very well preserved, mudbrick walls, some with stone foundations, plastered floors. 3 layers identified, of which the top most is quite disturbed
Gritille	?	well preserved / 4 phases: upper Neolithic (phase A, B), lower Neolithic (phase C, D), phase B best documented: mudbrick walls, courtyard defined by wall
Nevalla Çori	?	well preserved, stone foundations, similar to cell buildings from Çayönü, / 3 subphases
Period 5		
Çatal Höyük (VIII- II)	c. 12 ha	very well preserved / sun-dried mudbrick walls / several rebuilt layers
Mersin	c. 4 ha	rectangular str., with stone walls, 2 Neolithic phases: upper and lower; best preserved str. come from the upper layer (XXVI-XXV) not clear info. about floors : at least 2 floors within each str.
Period 6		
Çatal Höyük	?	mudbrick str., rectangular; limited info., rather disturbed
Haçilar (IX-VI)	c. 1,5 ha	well preserved (mainly level VI), mudbick walls, most str. with two successive floors
(Mersin)	?	layers from Halaf and Ubaid culture [not included in present analysis]

Illustration 155: Information about the layout of the settlements.

	boundaries	layout	non domestic buildings	communal space
Period 3 - 'PPNB'				
Haçilar / Aceramic	–	?	–	courtyard
Çayönü				
wattle and daub level	–	f?		?
grill-plan level	–	f	flagstone building	?
intermediate level	–	f	skull-building	?
cell-plan level	–	f	terrazzo building	courtyard
large room level	–	?		?
Cafer Höyük				
east/early phase	–	f?	–	–
east/middle phase	–	a?	–	–
east/late phase	–	a?	–	–
west/late phase	–	a?	–	court/alleys?
Period 4 - 'late PPNB'				
Çatal Höyük(XII-IX)	–	a	'shrines'	courtyard
Can Hasan III	–	a	–	alleys/courts?
Suberde	–	?	–	–
Gritille	–	a	–	courtyard
Nevalla Çori	–	f	?	–
Period 5				
Çatal Höyük (VIII- II)	–	a	'shrines'	courts/alleys
Mersin (XXXIII-XXV)	–	?	–	courtyard?
Period 6				
Çatal Höyük (I)	–	a?	–	–
Haçilar (IX-VI)	–	a	?	courtyard

Note: layout: f: free-standing structures, a: adjacent

Illustration 156: Structural information.

	complete units	shape	material	segmentation	type of partition	access	range of size
Period 3 - 'PPNB'							
Haçllar / Aceramic	_	rectillnear	mudbrick	?	?	?	?
çayönü							
wattle and daub level	?	oval/round	wattle and daub	?	A?	a?	c. 12 sq.m. (2)
grill-plan level	*	rectangular	stone/posts	s	Bd/Cb?	a?	av. 60 sq.m. (30?)
intermediate level	?	rectangular	stone/mudbrick?	s	Bd?	a'?	?
cell-plan level	*	rectangular	stone/mudbrick	s	Cb/Bd?	a'	30 - 40 sq.m. (?)
large room level	?	rectangular	stone/mudbrick?	?	A?	?	?
Cafer Höyük							
east/early phase	*	rectangular	stone, mudbrick	s	Bc, Be	a'?	21,6 sq.m. (1)
east/middle phase	_	rectangular	stone?/mudbrick	s	Cb	a'?	c 34 sq.m. (1)
east/late phase	_	rectangular	stone?/mudbrick	s, a	Cb?	a'?	?
west/late phase	_	rectangular	stone/mudbrick	s, a	Cb, A	a'?	80 - 20 sq.m. (2)
Period 4 - 'late PPNB'							
çatal Höyük(XII-IX)	?	rectangular	mudbrick	s/a	A?, Bc	a'	?
Can Hasan III	*	squarish	mudbrick	s	A, Bc	a'	?
Suberde	_	rectangular	mudbrick/stone	?	Ba	?	?
Gritille	_	rectangular	mudbrick	s, a?	A?, Bd	a	?
Nevalla çori	*	rectangular	stone/mudrick?	s	Cb	a'?	60 - 96 sq.m. (3)
Period 5							
çatal Höyük(VIII- II)	*	squarish	mudbrick	s/a	A, Ba, Bc	a'	11-48 sq.m. (70?)
Mersin	_	rectilinear	stone	s, a?	A?, Bd	a?	?
Period 6							

Çatal Höyük(I)	?	rectilinear	mudbrick	?s/a	Bc?	a'?	?
Haçilar(IX-VI)	*	rectangular	mudbrick	s/a	A, Ba, Ba/Cc	a	35-55 sq.m. (6)

note: segmentation: s: subtractive, a: agglutinative; types of partition: A: no partition, B: horizontal partitions (Ba: partition wall, Bb: ridge, Bc: one room, Bd: multiple rooms, Be: three rooms-megaroid type), C: vertical partitions (Ca: buttresses, Cb: basement, Cc: 'staircase', second floor?);
access: a: one entrance, b: more than one entrance, c: court included in the house plan, range of size : the number in parenthesis refers to the number of structures on which the estimates are made. [see also app. I]

Illustration 157: Features found inside the structures.

	hearths	platforms	fixed containers	posts	pits	burials	other
Period 3 - 'PPNB'							
Haçilar / Aceramic	hearth	–	–	–	–	–	
Çayönü							
wattle and daub level	?	?	?	?	?	a	
grill-plan level	hearth	?	bins	posts	–	a?	
intermediate level	–	bench	–	–	–	–	
cell-plan level	–	benches	–	–	–	a	
large room level	?	?	?	?	?	a (?)	
Cafer Höyük							
east/early phase	hearth/oven	–	–	–	–	–	
east/middle phase	–	pavings	enclosed area	–	–	–	
east/late phase	–	–	–	–	–	–	
west/late phase	–	–	–	yes	–	–	
Period 4 - 'late PPNB'							
Çatal Höyük (XII-IX)	hearth, oven	platforms benches	?	yes	–	a	
Can Hasan III	hearths		bins				
Suberde	–	benches	bins	–	–	–	–
Gritille	–	–	–	–	–	–	–
Nevalla Çori	–	banquette	–	–	–	a'	–
Period 5							
Çatal Höyük (VIII- II)	hearths, ovens, kilns	platforms benches	bins niches	yes	–	a	(reliefs) (paintings)
Mersin						a	
Period 6							

Çatal Höyük (I) Haçilar (IX-VI)	hearths oven hearths	– benches	– cupboards bins fire-boxes	– posts	– –	–

note: burials : a: burials, a': skull / secondary burials, b: plastered skulls

Illustration 158: Features found outside.

	hearths	platforms	fixed containers	pits	posts	burials
Period 3 - 'PPNB'						
Haçilar / Aceramic	hearths, ovens	–	bins	–	yes	–
Çayönü						
wattle and daub level	?					a
grill-plan	?					a, a'
intermediate	?					
cell-plan	?					
large room level	?					
Cafer Höyük						
east/early phase	hearths/firepits	–	–	yes	–	–
east/middle phase	hearths	–	–	yes	yes	–
east/late phase	firepits	paved areas	–	–	–	–
west/late phase	firepits	benches	–	–	yes	–
Period 4 - 'late PPNB'						
Çatal Höyük(XII-IX)	–	–	–	–	–	–
Can Hasan III	–	–	–	–	–	–
Suberde	hearths?	–	–	–	–	–
Gritille	hearth	–	–	yes	–	–
Nevalla Çori	–	–	–	–	–	–
Period 5						
Çatal Höyük(VIII- II)	ovens (Level IV-V)	–	–	–	–	–
Mersin	fireplace	–	–	–	–	–
Period 6						
Çatal Höyük	–	–	–	–	–	–
Haçilar (IX-VI)	–	–	–	yes	yes	–

Note: burials: a: burials, a': skull/secondary burial, b: plastered skulls

Illustration 159 : Comments on the nature of the contextual information.

	nature of deposition (high / low)
Period 3 - 'PPNB'	
Haçilar / Aceramic	very low: 'not a single object lying on any of the house floors' (Mellaart 1970:4)
Çayönü	
wattle and daub level	?
grill-plan	low inside, high outside : flint artefacts, animal bones, carbonised seeds process of abandoning the str. by covering them with stones
intermediate	low? no evidence due to the lack of floors, outside: work areas, pits, hearths
cell-plan	? unclear whether basements or not, no floor preserved, some quite rich in content with different types of artefacts in each cell (see Redman 1975)(destruction layers)
large room level	?
Cafer Höyük	rather high deposition, higher outside than inside: eastern area: level VI: 2 phases of construction and occupation in the latest level of one of the rooms: human figurines, incised clay plaques, bone sculptures, beads, microfauna, vegetable remains later abandoned and used for external occupation: bones and post-holes in the same area: north zone: outside habitation: full of debitage south zone: little debitage, multicellular str. with high depositions of artefacts west area: ditches full of debitage (Cauvin & Aurenche 1986: 185)
Period 4 - 'late PPNB'	
Çatal Höyük(XII-IX)	low, 'rooms were occupied until they became uninhabitable. At this point they were filled in with refuse - layers of animal bones, ashes, rotten matting etc. - which effected the preservation...much more adversely than the solid brick and plaster which forms the fill in later building-levels'. (Mellaart 1966: 169)
Can Hasan III	development of site both horizontally (courts) and vertically (superimposed str.), selective info. about deposition, not much info. about outside space
Suberde	no pottery, lots of tools but the available info. is not related to particular str.
Gritille	phase B: low on floors: 'decayed mudbrick, with virtually no occupation debris on the floors' (Voigt 1988: 221); fl. B2 is an exception with a rather rich deposit high deposition on open zone: this area 'provided most of the artefacts, animal bones, and seeds, as well as numerous features' (Voigt 1988: 221); also a number of pits either for cooking or full of tools and shipped stone debris phase C: deep cylindrical pits (for food storage) dug into the clean clay debris of abandoned str. (Voigt 1988: 222)
Nevalla Çori	floors of mud, channels roofed with slabs / limited info. about deposition/ 9 skulls recovered in pits under the floor of two houses: secondary burials
Period 5	
Çatal Höyük (VIII- II)	low; 'scrupulous clean' from refuse, but with considerable number of artefacts, especially in the form of 'caches' inside bins (axes, stone tools, knuckle bones, polishing stones) refuse disposal usually found outside in the courtyards (Mellaart 1967:62-63) in general no detailed contextual info.
Mersin	? not much info. about depositional variability
Period 6	
Çatal Höyük (I)	disturbed, not clear information

Haçilar (IX-VI)	deposition varies: level VII: very low, clean of finds, level VI: was destroyed by fire and yielded considerable numbers of all kinds of finds (Mellaart 1970: 14) most of the artefacts found in the screened-off part of the house , lots of organic material as well / grain, seeds (in bins)

Illustration 160: Finds associated with particular floors.

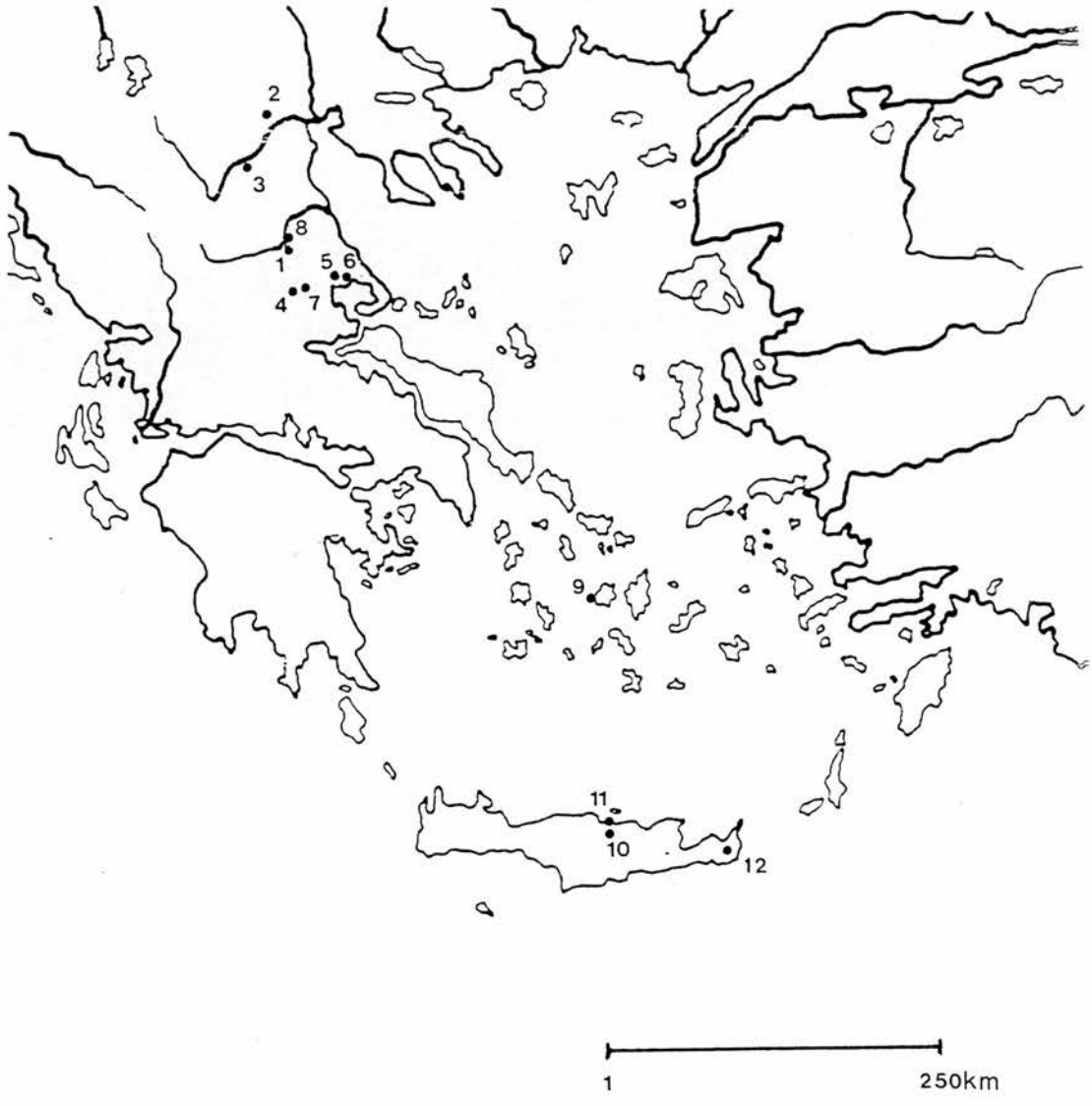
	layer	structure	type of finds
Period 3 - 'PPNB'			
Haçilar / Aceramic	–	–	–
Çayönü	–	–	–
Cafer Höyük	level VI/east	cell 65	sickles, bone pieces, ornaments
		cell 63	arrowheads, daggers, special finds: incised plaque from clay, 4 figurines (1 masculine)
		? other cells	much fauna and microfauna
Period 4 - 'late PPNB'			
Çatal Höyük(XII-IX)	–	–	–
Can Hasan III	layer 5	?	contained bins with grain and seeds, also grinders, querns, mortars
Suberde	–	–	–
Gritille	phase B	Building 2	large collection of ground and chipped stone artefacts, including spheres, grinding stones, celts, points etc.
Nevalla Çori	–	–	–
Period 5			
Çatal Höyük (VIII- II)	–	–	–
Mersin	layer XXVI	300-306	very low deposition, few finds, not recorded by floor
	layer XXV	str. 288	no domestic activities found within this area', interpreted: as 'sheepfold'
	layer XXV	str. 289	rather high: sherds, bracelets, notched stones, weights, bone awl, shell and beads necklace (Garstang 1953: 43)
Period 6			
Çatal Höyük	–	–	–
Haçilar (IX-VI)	level VI	Q5	vast majority of statuettes (32?), figurines, pottery , grains etc.
	level VI	Q3	yielded the second large number of statuettes(11), figurines, vessels
	level VI	Q4	5 statuettes, fine pottery , lentils in bin
	level VI	Q2	12 figurines, peas, barley (in bins)
	level VI	P1	3 statuettes, 1 figurine, stone bowls, jewellery, pottery (bowls, jars)

Illustration 161: The recording system and the presentation of the material in each publication.

			stratigraphy			description of architecture			description of finds		
	complete units	preservation	by phase	by structure	by floor	by phase	structure	floor	by layer	by structure	by floor
Period 3 - 'PPNB'											
Haçilar / Aceramic	–	b	*	–	–	*	–	–	*	–	–
Çayönü	*	a	*	–	–	*	selective	–	*	–	–
Cafer Höyük	*	a	*	*	*	*	*	*	*	*	–
Period 4 - 'late PPNB'											
Çatal Höyük(XII-IX)	?	b	*	–	–	*	–	–	*	–	–
Can Hasan III	*	a	*	–	–	*	selective	–	*	–	–
Suberde	–	b	*	–	–	*	–	–	*	–	–
Gritille	–	a	*	selective	–	*	selective	–	*	–	–
Nevalla Çori	*	a	*	–	–	*	*	–	*	–	–
Period 5											
Çatal Höyük(VIII- II)	*	a	*	selective	–	*	selective	–	*	selective	–
Mersin	–	a	*	–	–	*	–	–	*	selective	–
Period 6											
Çatal Höyük(I)	?	b	*	–	–	–	–	–	–	–	–
Haçilar(IX-VI)	*	a	*	selective	–	*	*	–	*	selective	–

Note: preservation: a: well preserved, b: poorly preserved, walls or floors are difficult to identify (for details see ill. 154)

Illustration 162: Map of Greece, showing the Neolithic sites under examination.

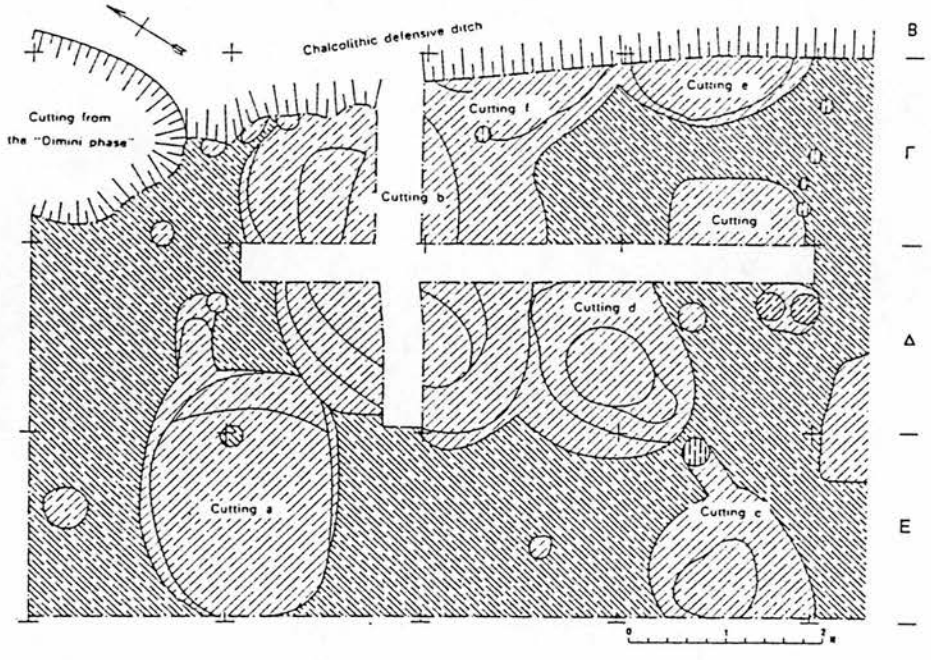


Key of sites:

1. Argissa
2. Nea Nikomedeia
3. Servia
4. Achilleio
5. Sesklo
6. Dimini
7. Tsangli
8. Otzaki
9. Saliagos
10. Knossos
11. Magassa
12. Katsamba

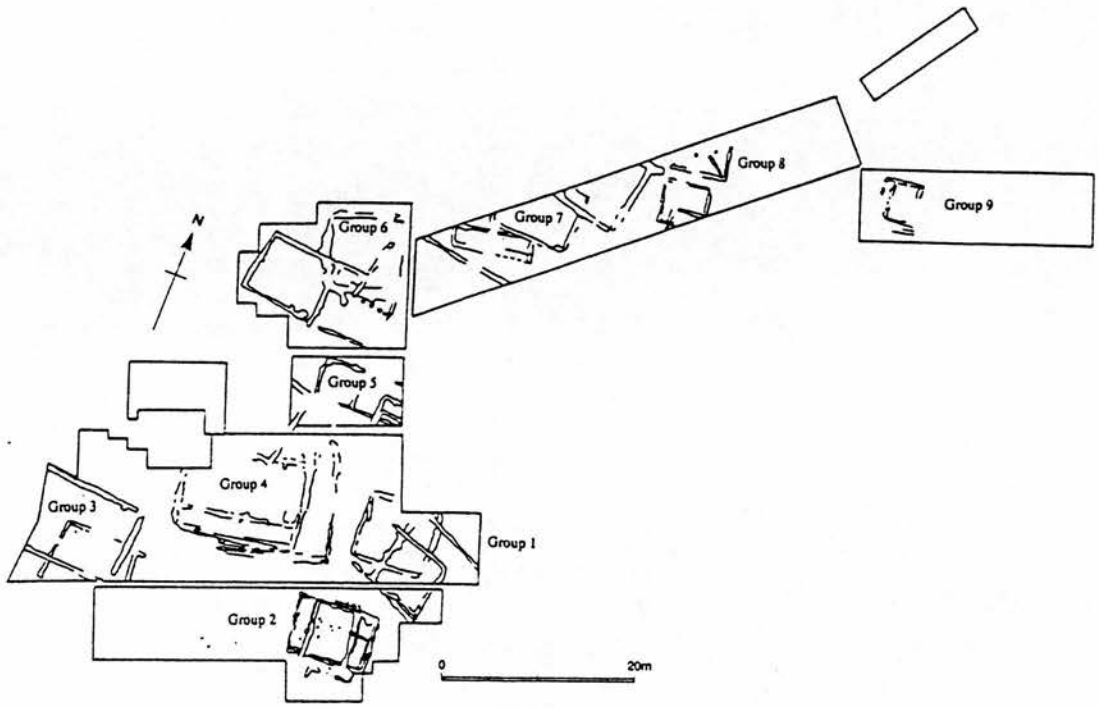
(after Melas 1985)

Illustration 163: Argissa. Aceramic period.



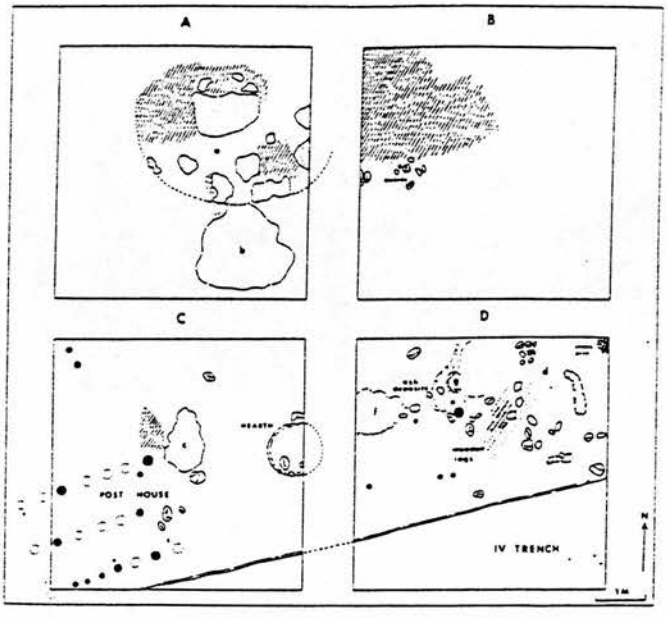
(taken from Theocharis 1973: fig. 195)

Illustration 164: Nea Nikomedeia, Early Neolithic period.

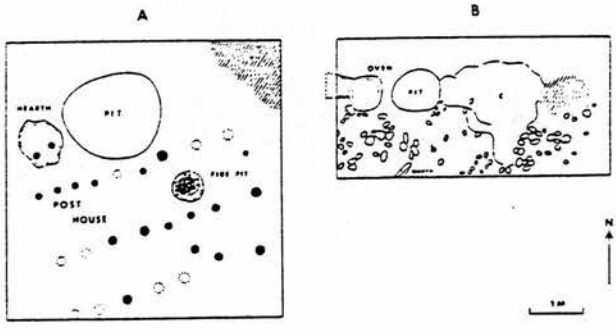


(taken from Pyke and Yiouni 1996: fig. 2.2)

Illustration 165: Achilleio, Early Neolithic period, phase IIb and IIa.

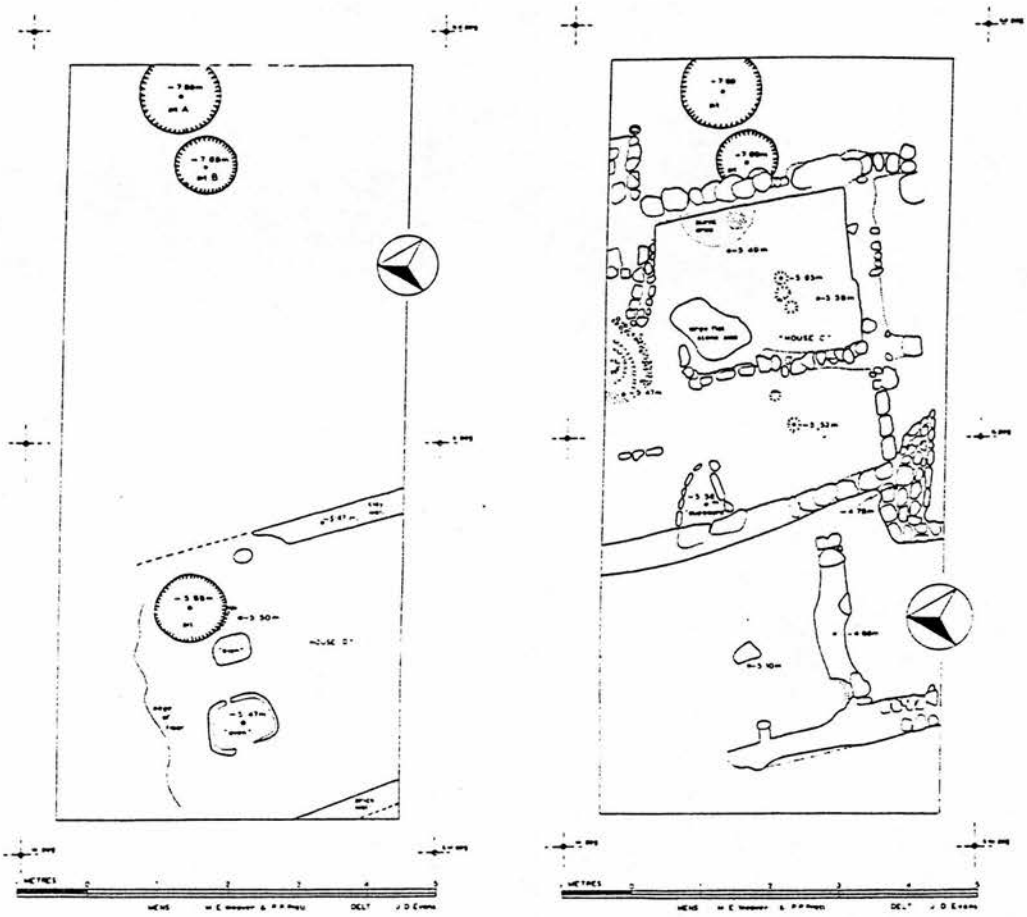


(phase IIb; taken from Gimbutas et al. 1989: fig. 4.11)



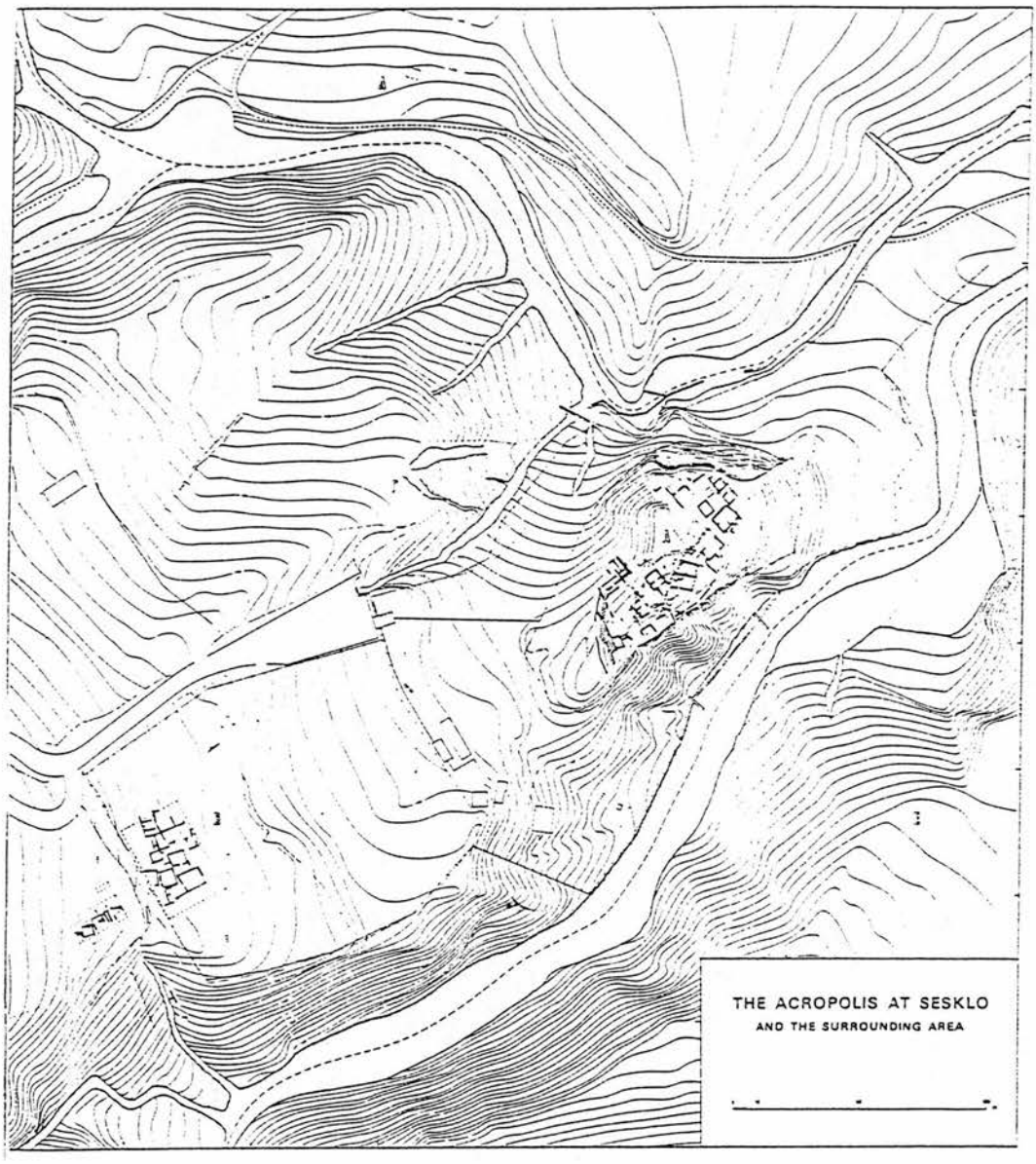
(phase IIa; taken from Gimbutas et al. 1989: fig. 4.7)

Illustration 166: Knossos, Early Neolithic, Area AC, levels VIII and VII.



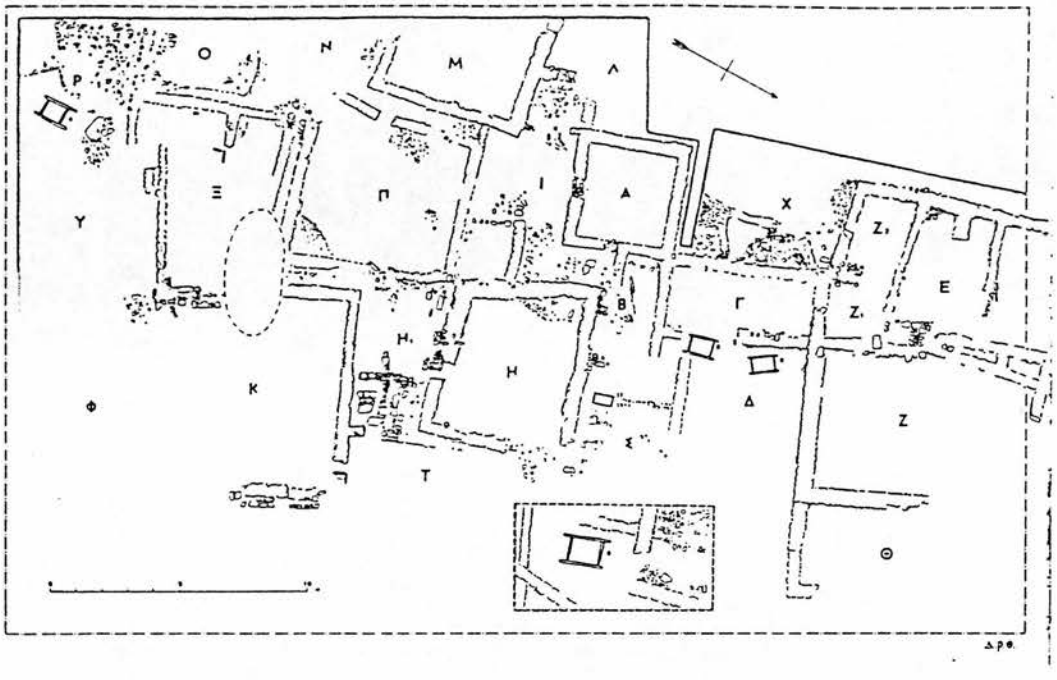
(taken from Evans 1964: fig. 10 and 11)

Illustration 167: Sesklo. Middle Neolithic.



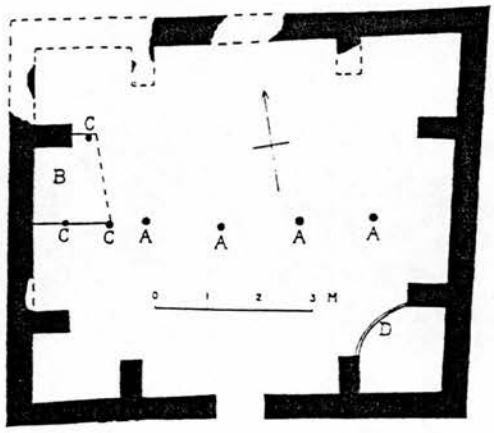
(taken from Theocharis 1973: fig. 176)

Illustration 168: Sesklo. Middle Neolithic, area outside the acropolis.

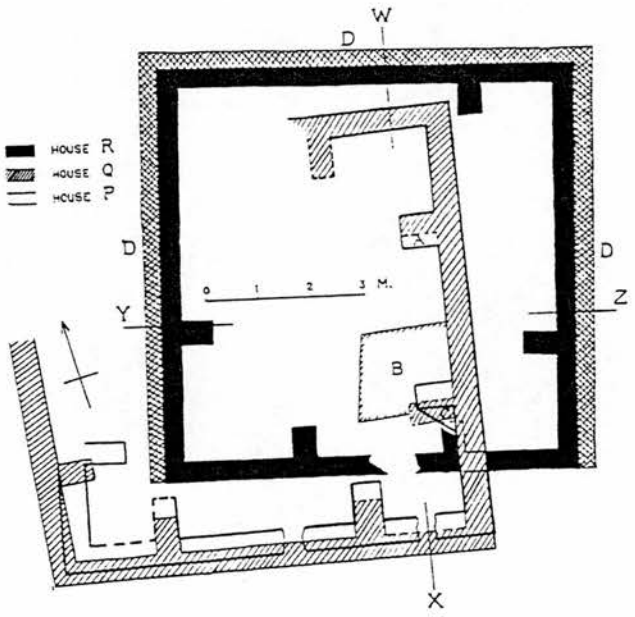


(taken from Theocharis 1973: fig. 179)

Illustration 169: Tsangli, Middle Neolithic, structures T, P, Q, and R.

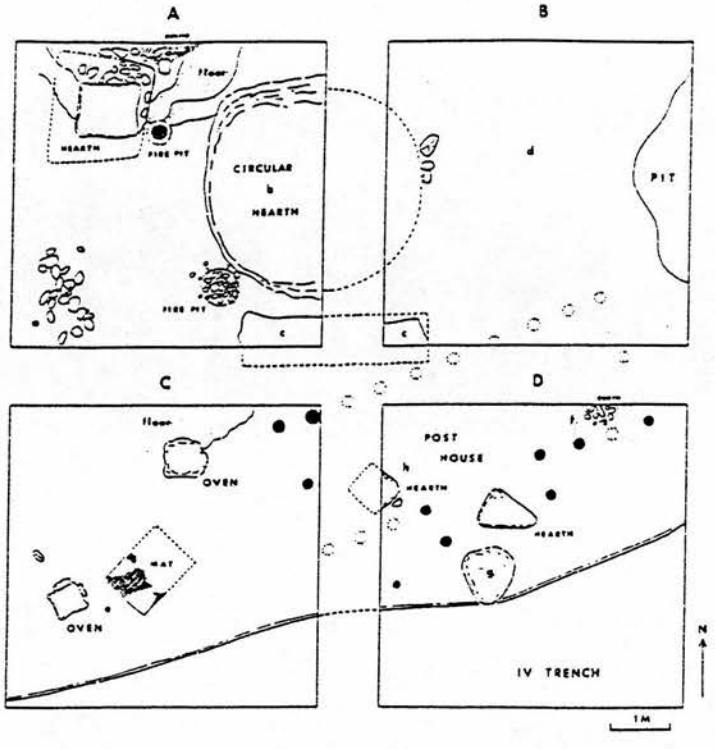


(structure T; taken from Wace and Thompson 1912: fig. 64)



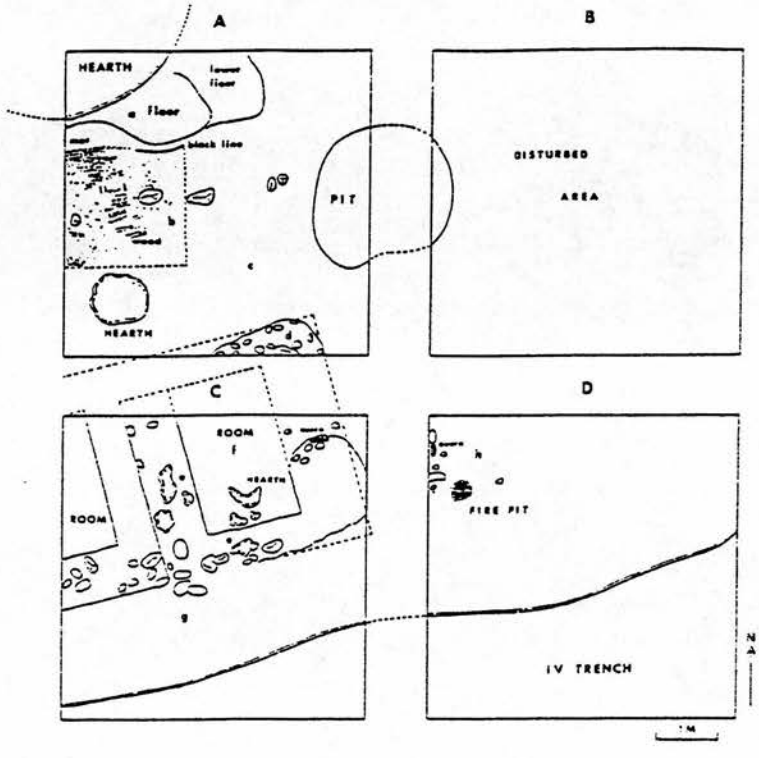
(structures P, Q, R; taken from Wace and Thompson 1912: fig. 65)

Illustration 170: Achilleio, Middle Neolithic, phase late IIIb.



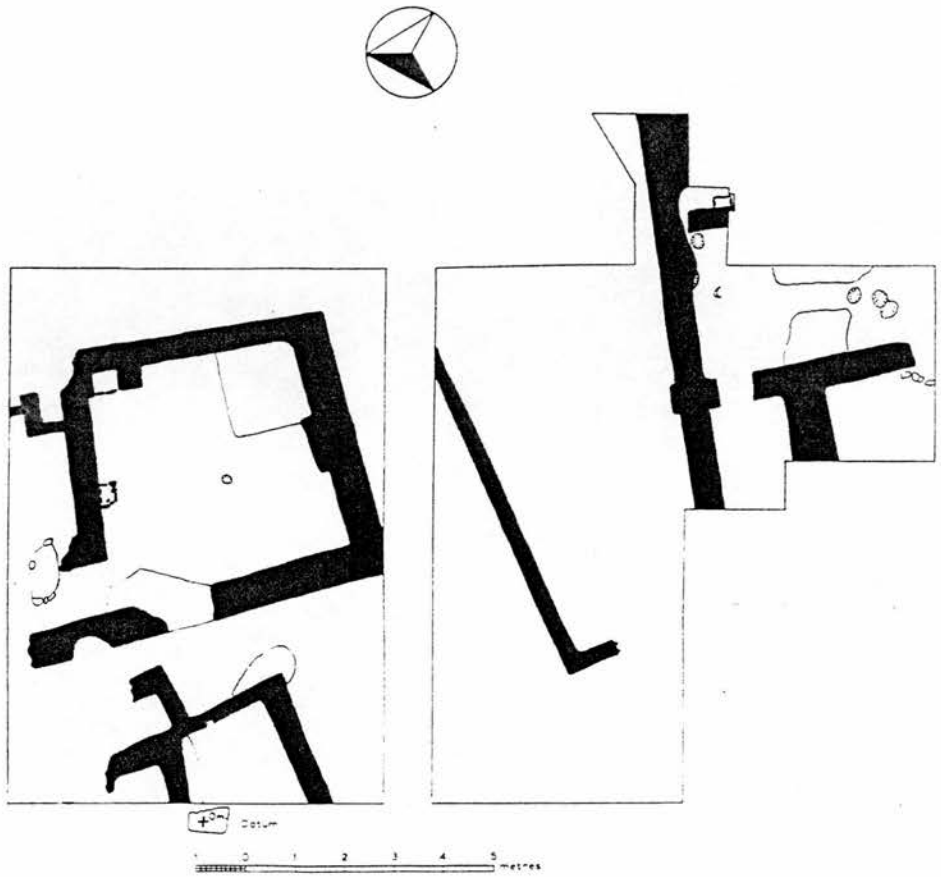
(taken from Gimbutas et al. 1989: fig. 4.25)

Illustration 171: Achilleio, Middle Neolithic, phase IVa.



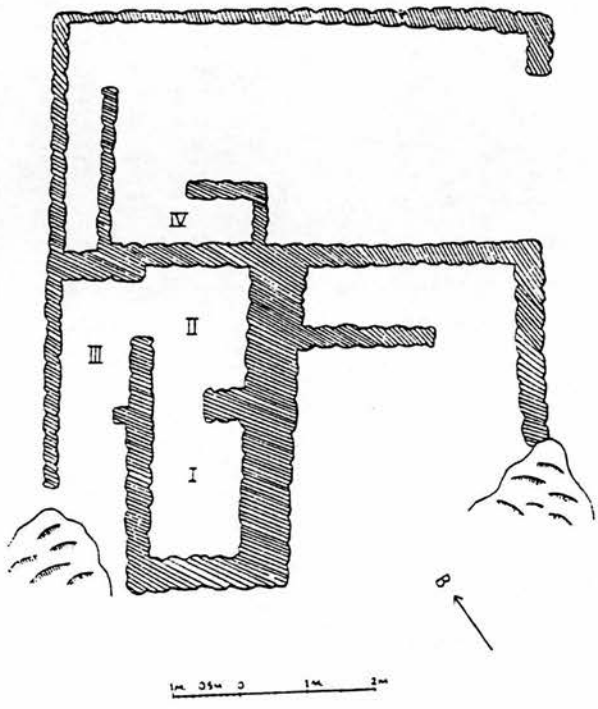
(taken from Gimbutas et al. 1989: fig. 4.33)

Illustration 172: Knossos, Stratum III, central court.



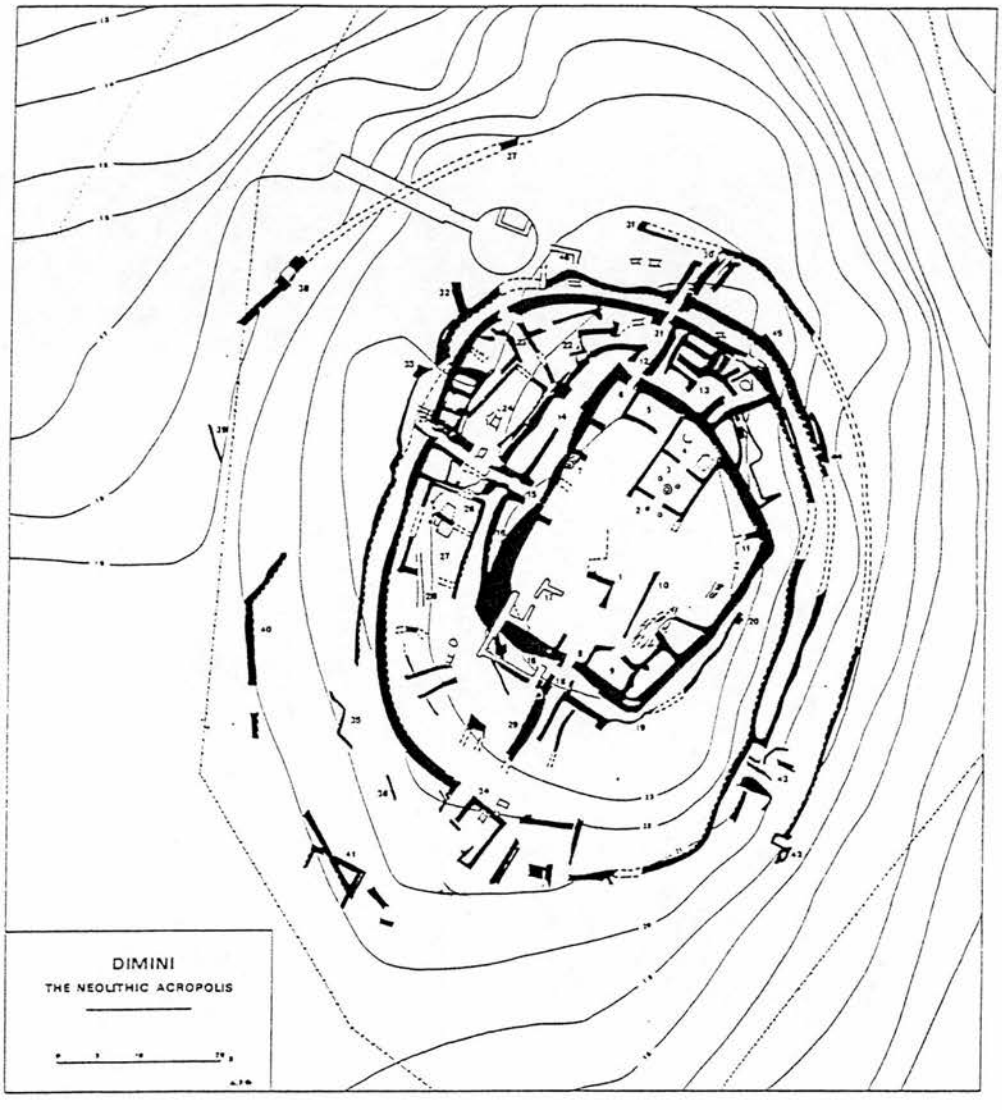
(taken from Evans 1964: fig. 2)

Illustration 173: Katsamba, Middle Neolithic.



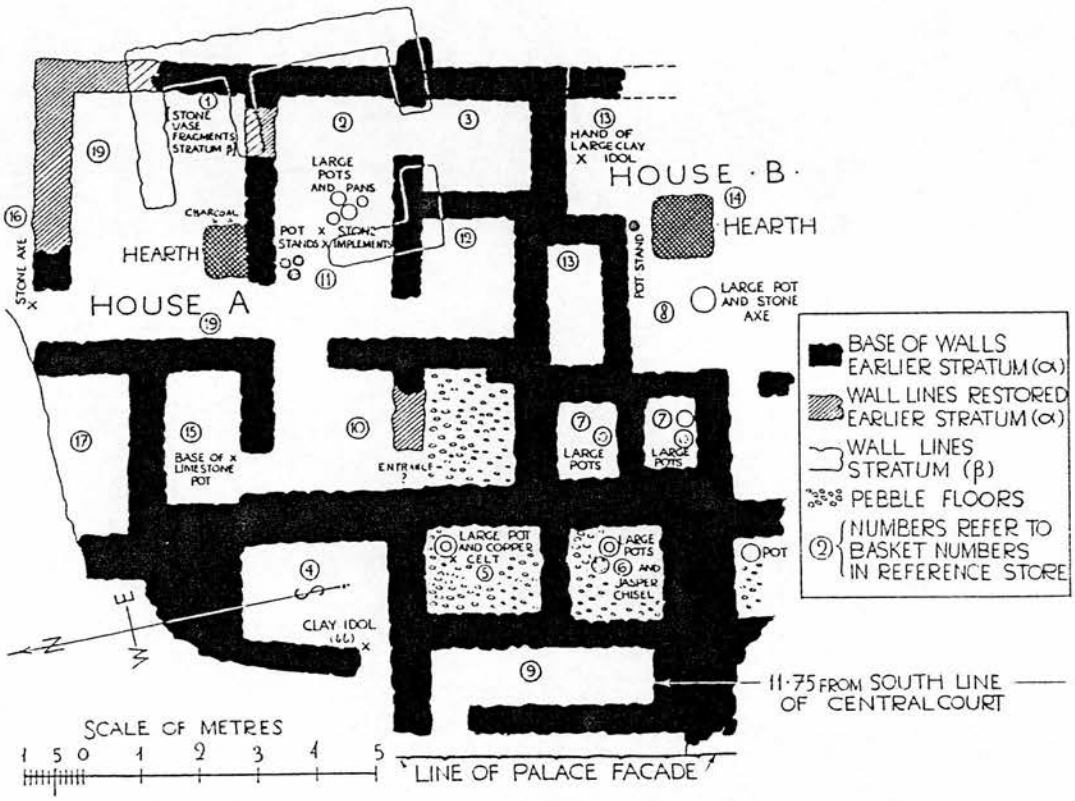
(taken from Alexiou 1954: fig. 2)

Illustration 174: Dimini. Late Neolithic.



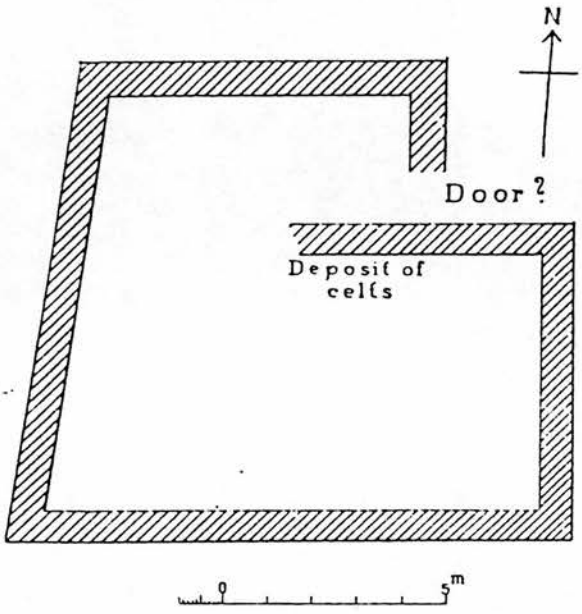
(taken from Theocharis 1973: fig. 185)

Illustration 175: Knossos, Late Neolithic.



(taken from Evans 1928: fig. 8a)

Illustration 176: Magasa, Late Neolithic.



(taken from Dawkins 1905: fig. 2)

Illustration 177: Neolithic sites in Greece.

sites	period	publication	excavation	references
Argissa	AN,EN,LN	final publication	soundings	Milojcic 1962
Nea Nikomedeia	EN, LN	final publication	extensive	Pyke & Yiouni 1996
Servia	EN, MN, LN	reports	soundings	Ridley and Wardle 1979
Achilleio	AN, EN, MN	final publicaiton	soundings	Gimbutas *et al.* 1989
Sesklo	AN, MN, LN	final publ /reports	extensive	Tsountas 1908,Wijnen 1981
Dimini	LN, FN	final public/reports	extensive	Tsountas 1908, Hourmouziadis 1979
Tsangli	MN, LN	final publication	soundings	Wace & Thompson 1912
Otzaki	EN, MN, LN	final publicaiton	soundings	Milojcic 1971
Saliagos	LN	final publication	extensive	Evans-Renfrew 1968
Knossos	AN, EN, MN, LN, FN	final publ/reports	soundings	Evans 1964, Warren *et al.* 1968
Magasa	EN, LN	report	soundings	Dawkins 1904-5
Katsamba	EN?,MN	report	soundings	Alexiou 1954

Illustration 178: Description of the archaeological evidence.

	size	nature of habitation
ACERAMIC		
Argissa	_	pit huts, cut into virgin soil, posts and hearths
(Knossos X)	_	traces of unfired brick walls, pits, posts, very fragmented info.
EARLY NEOLITHIC		
Nea Nikomedeia	2.5 ha	post houses, difficult to trace floors, foundation trenches
Achilleio I-IIIa	_	post houses, no reference to floors
(Sesklo)	_	traces of *pisé* walls, very fragmented info.
Knossos IX-IV	2 ha	buildings made of mudbick and *pisé* on stone, well preserved
MIDDLE NEOLITHIC		
Servia	_	post houses, no floors identified, one str. with 'basement'
Achilleio IIIb-IV	_	'post houses' and 'stone houses', poorly preserved
Sesklo	100 ha	stone str., well preserved, floors not always clear
Tsangli	c 4 ha	stone and brick walls, well preserved
Otzaki	_	*pisé* walls, difficult to identify floors
Knossos III-II	?	stone str., well preserved
Katsamba	_	stone foundations, well preserved, info. about floors unclear
LATE NEOLITHIC		
Dimini	0.8 ha	stone foundations, well preserved
Sesklo	_	stone foundations, only one megaroid str. (smaller str. probably added to it)
Saliagos	_	stone foundations, traces of floors, poorly preserved
Knossos	5 ha	stone walls, well preserved (at least two levels: a and b)
Magasa	_	stone foundations, close to surface but relatively well preserved

Illustration 179: Description of the layout of the settlements.

	boundaries	layout	non domestic buildings	communal space
ACERAMIC				
Argissa	–	f	–	–
EARLY NEOLITHIC				
Nea Nikomedeia	?(ditches)	f	?	?
Achilleio I-IIIa	–	f	–	courtyard
Knossos IX-IV	–	?	–	?
MIDDLE NEOLITHIC				
Servia	–	f	–	–
Achilleio IIIb-IV	–	f	?	–
Sesklo /acropolis	wall/ditch	f	?	?
Sesklo / south	–	a	–	?
Tsangli	–	f	–	–
Otzaki	–	f	–	alleys
Knossos III-II	–	?	–	–
Katsamba	–	f?	–	–
LATE NEOLITHIC				
Dimini	walls	a	?	courtyard/alleys
Sesklo	walls	f?	?	courtyard
Saliagos	wall	a	–	courtyard
Knossos	–	?	–	–
Magasa	–	f	–	–

note: layout: f: free standing structures, a: adjacent

Illustration 180: Structural information

	complete units	shape	material	segmentation	type of partition	access	range of size
ACERAMIC							
Argissa	*	oval	pit hut	_	_	_	_
EARLY NEOLITHIC							
Nea Nikomedeia	*	sq./rect.	post huts	s	Bc, Be	a?	20-160 sq.m. (20)
Achilleio I-IIIa	*?	rectangular	post huts	_	A	a?	_
Knossos IX-IV	_	rectangular	*pisé* /stone	?s/a	Bd	a?	_
MIDDLE NEOLITHIC							
Servia	_	rectangular	post huts	s/a?	A,Bc,Cb	a?	c. 20-40 sq.m. (3)
Achilleio IIIb-IV	*?	rectangular	post, stone	s	A, Bc	a?	_
Sesklo /acropolis	*	rectangular	stone/ *pisé*	s	A, Be	a	10-50 sq.m. (22)
Sesklo / south	*	rectangular	stone/ *pisé*	a/s	A,Bc	a	"
Tsangli	*	square	stone/brick	s?	Ca	a	_
Otzaki	*	rectangular	*pisé*	s	A,Bc,Ca	a?	_
Knossos III-II	?	rectangular	stone/ *pisé*	?s/a	A?, Bd	a?	52.3 sq.m (1)
Katsamba	*	rectangular	stone/ *pisé*	a	Bd	b	53.29 sq.m (1)
LATE NEOLITHIC							
Dimini	*	rectangular	stone/ *pisé*	s/a	A, Ba	a/b	_
Sesklo	*	rectangular	stone/ *pisé*	s/a	Be	a/b	152 sq.m.(1?)
Saliagos	*?	rectangular	stone/ *pisé*	a	A?	a?	_
Knossos	*?	rectangular	stone/ *pisé*	a	Bd	a	_
Magasa	*	rectangular	stone/ *pisé*	?s	Ba	a?	

note: segmentation: s: subtractive, a: agglutinative; types of partition: A: no partition, B: horizontal partitions (Ba: partition wall, Bb: ridge, Bc: one room, Bd: multiple rooms, Be: three rooms-megaroid type), C: vertical partitions (Ca: buttresses, Cb: basement, Cc: 'staircase', second floor?); access: a: one entrance, b: more than one entrance, c: court included in the house plan, range of size : the number in parenthesis refers to the number of structures on which the estimates are made. [see also app. I]

Illustration 181: Features found inside the structures.

	hearths	platforms	fixed containers	posts	pits	burials	other
ACERAMIC							
Argissa	hearths						
EARLY NEOLITHIC							
Nea Nikomedeia	?						
Achilleio I-IIIa	firepit						
Knossos IX-IV	oven/ ash	slab	cupboards		pits		
MIDDLE NEOLITHIC							
Servia	hearth?			posts			
Achilleio IIIb-IV	hearths	bench					
Sesklo	?	bench/paving	enclosed areas	posts	pits		
Tsangli		platform	enclosed areas	posts			
Otzaki	?						
Knossos III-II	hearths	paved areas	cupboards		pits		
Katsamba							
LATE NEOLITHIC							
Dimini	hearths	paved areas	enclosed areas				
Sesklo	hearth/ovens?		basins?	posts	pit		
Saliagos	hearths?						
Knossos	hearths	pavings					
Magasa							

Note: burials: a: burials, a': secondary burials, b: plastered skulls

Illustration 182: Features found outside.

	hearths	platforms	fixed containers	pits	posts	burials
ACERAMIC						
Argissa	?					
EARLY NEOLITHIC						
Nea Nikomedeia	?			?		?
Achilleio I-IIIa	hearths/oven	bench/pavings		pits		
Knossos IX-IV		pebbled pavings		pits		
MIDDLE NEOLITHIC						
Servia	hearths	paved areas				
Achilleio IIIb-IV	firepits, hearths, ovens	platforms		pits		
Sesklo	fireplaces					
Tsangli						
Otzaki	fireplaces					
Knossos III-II		pebbled pavings		pits		
Katsamba						
LATE NEOLITHIC						
Dimini	fireplaces	pavings				
Sesklo	fireplaces?	pavings?				
Saliagos			silos?			
Knossos						
Magasa						

Note: burials: a: burials, a': secondary burials, b: plastered skulls

Illustration 183: Comments on the nature of the contextual information.

	nature of deposition (high / low)
ACERAMIC	
Argissa	? (distribution of finds by layer)
EARLY NEOLITHIC	
Nea Nikomedeia	? (not possible to associate finds with str.)
Achilleio I-IIIa	relatively low, much higher outside the huts; 'bone refuse as abundant in and around the house as they were in the courtyard' (Gimbutas *et al.* 1989:40)
Knossos IX-IV	low, interiors kept clean, no further info. about exteriors
MIDDLE NEOLITHIC	
Servia	low, but high outside (refuse) / phase 4: destruction layer: half a basement excavated
Achilleio IIIb-IV	deposition is lower inside than outside
Sesklo /acropolis	rather low (not sufficient information by Tsountas, distribution by phase)
Sesklo / south	? (information not published yet) / examples of destruction layers (Kotsakis 1980) (also Theocharis 1976)
Tsangli	low? (not clear association with floors)
Otzaki	low ? (distribution by layer)
Knossos III-II	low, cleaned out interiors
Katsamba	high/ little info.
LATE NEOLITHIC	
Dimini	rather low, little info. about portable finds/ best example from str. 18 (Hourmouziadis 1979:149)
Sesklo	low? / little info. about portable finds / poor stratigraphic description (Tsountas 1908:97)
Saliagos	low, finds related to layers rather than str.
Knossos	low ? (upper level: b, not well preserved), level a: unclear recording/selective
Magasa	relatively high (concentration of finds in one specific location within the str.)

Illustration 184: Finds associated with particular floors.

	layer	structure	type of finds
ACERAMIC			
Argissa	–	–	–
EARLY NEOLITHIC			
Nea Nikomedeia	–	–	-
Achilleio I-IIIa	phase Ib. ii	stone/ *pisé*	querns, 1 spatula, 1 stone ball, 1 awl, 2 figurines, sherds
	phase IIa	post house	2 figurines, 1 anthropomorphic vessel, 2 awls?, 1 worked antler
			disposal of bones/refuse disposal
			courtyard: 7 blades, 3 obsidian blades, 2 antler tools, 4 querns,
			2 grinders, 2 stone balls, 1 axe, 1 scraper, sherds, animal bones
	phase IIb	post house	abundance of refuse disposal/bones, 4 awls, 1 quern, 2 blades,
			1 obsidian blade, 1 spool, pottery disks, 1 stone ball, 2 hand grinders,
			1 pestle
			courtyard: querns, grinding stones, spatula, axes, figurines, blades,
			cult vessels, chipped stone tools: obsidian blades, palettes,
			blades, hammerstone, bone tools: awls, needles etc.
Knossos IX-IV	–	–	–
MIDDLE NEOLITHIC			
Servia	phase 4	basement	on the floor: storage jars, pounders, heaps of einkorn, lentils etc.
			in the debris: clay whorls, bracelets of stone and shell, pendants,
			some fine vessels
Achilleio IIIb-IV	phase IIIb .i	pit house	no bone refuse, 1 quern, few blades, few sherds
	phase IIIb .ii	pit house	awls & needles stuck in the wall?, spools, querns, grinders, spatula,
			an antler, a ladle, sherds
	phase IVa.i	stone str.	bench room: 2 spindle whorls, 1 spool, 1 needle, 1 awl, pottery disks,
			figurine fragments
			hearth room: blade tools, 1 axe, 1 clay ball, perforated disks, figurine
			fragments, sherds
	phase IVa.ii	stone str.	hearth room: 1 palette, 1 polisher, 1 perforated disk, 1 spool, 1 ladle,
			several figurines, 1 perforated bone ornament, sherds
Sesklo /acropolis			
Sesklo / south	IIIb	str. 1-2-3	pithoi, amphorae, benches, 1 millstone, 1 pestle, (Theocharis 1976)
	MN	str. C	storage vessels, querns (Kotsakis 1980: 94)/destruction layer/*in situ* finds
	MN	str. Z	*in situ* querns, pottery (Kotsakis 1980)
Tsangli			
Otzaki			
Knossos III-II			
Katsamba	general	general	5 axes, 1 pestle, 'many' rubbers, 'many' querns, 1 flake/blade,
			sherds, pieces of obsidian
LATE NEOLITHIC			
Dimini	late Neolithic	str. 18	pithos with carbonised seeds in enclosed area, 1 pestle in 'working' area
Sesklo	–	–	–
Saliagos	–	–	–
Knossos	level a	house A?	large pots (in at least 4 separated cells), 1 chisel, 1 idol
Magasa	general	general	19 celts, 3 mill stones, obsidian chips, 1 hammer, 3 worked stones

Illustration 185: The recording system and the presentation of the material in each publication.

	architecture		stratigraphy			description of architecture			description of finds		
	complete units	preservation	by phase	by structure	by floor	by phase	by structure	by floor	by layer	by structure	by floor
ACERAMIC											
Argissa	*	b	*	–	–	*	*	–	*	–	–
('Knossos X)	–	–	*	–	–	–	–	–	*	–	–
EARLY NEOLITHIC											
Nea Nikomedeia	*	b	*	–	–	*	*	–	*	–	–
Achilleio I-IIIa	*?	b	*	–	–	*	*	–	*	*	–
('Sesklo)	–	b	*	–	–	*	–	–	*	–	–
Knossos IX-IV	–	a	*	selective	–	*	*	–	*	*	–
MIDDLE NEOLITHIC											
Servia	–	b	*	–	–	*	*	–	*	–	–
Achilleio IIIb-IV	*?	b	*	–	–	*	*	–	*	*	–
Sesklo	*	a	*	selective	–	*	*	–	*	selective	–
Tsangli	*	a	*	*	–	*	*	–	*	–	–
Otzaki	*	b	*	–	–	*	*	–	*	–	–
Knossos III-II	?	a	*	selecive	selective	*	*	–	*	selective	selective
Katsamba	*	a	*	selective	selective	*	*	–	*	selective	–
LATE NEOLITHIC											
Dimini	*	a	*	selective	selective	*	*	–	*	–	–
Saliagos	*?	b	*	–	–	*	–	–	*	–	–
Knossos	*?	a	*	selective	selective	*	selective	–	*	selective	selective
Magasa	*	a	*	*	–	*	*	–	*	*	–

Note: preservation: a: well preserved, b: poorly preserved, walls or floors are difficult to identify (for details see ill. 178)

APPENDICES

Appendix I Segmentation and the types of partition.

Contextual information from three Neolithic sites in Cyprus: Khirokitia, Sotira and Vrysi:

Appendix II Typological classifications: their use in final reports and in the present thesis.

Appendix III Distribution of features and finds in each site (analytical tables for level I of analysis).

Appendix IV Distribution of features and finds in completely excavated, preserved and 'undisturbed' units (level II of analysis).

Appendix V Database: contextual information from Khirokitia, Sotira and Vrysi.

APPENDIX I

Segmentation and the types of partition.

Segmentation and types of partition

Recent anthropological models (Kent 1984, 1987b, 1990, 1991) and the literature from sites in the Levant (Byrd and Banning 1988), suggest that the segmentation (division into segments) in the built environment and the use of space indicate degrees of cultural complexity and different behavioural patterns (see also chapter II). In ethnography the segmentation in architecture and the use of space is measured in terms of 'monofunctional and gender-specific activity areas, public, religious, commercial, and habitation buildings etc.' (Kent 1990:143). However, due to the fact that in archaeology such categories would not be applicable to the material available, I have only focus on the relative *frequency of partitions* within the structures.

As a result, I have divided the relevant information into two main categories: one which refers to the general form of a structure and how its space is reduced or enlarged, and another one which describes more specifically the type of partition that is used in each case (ill. 17, ill. 136, ill. 156, ill. 180).

The first category has two types (see also Byrd and Banning 1988:65-66):
subtractive: in which internal partitions 'differentiate' space in the structure *without* changing its initial shape, and
agglutinative: in which more space is provided by *adding* to the initial shape of the structure.

The second category is characterised by three types with subdivisions: type A: for structures without partitions, type B: for divisions of space along the horizontal axis of the structure (e.g. partition walls for additional rooms) and type C: for divisions of space along the vertical axis of the structure (e.g. buttresses for upper storeys and basements).

More specifically:

type A: str. with no internal partitions

type A': str. with no internal partitions but which are adjacent to other str . and might belong to a complex of str.

type Ba: str. with a partition wall. This type is common in Cyprus and Anatolia in str. of all shapes.. The height of the wall varies from 0.50-1.00m .

type Bb: str. with a low ridge, usually made of *pisé* or pebbles and covered with plaster. Its height is no more than 10-20 cm., and it is again most common in Cyprus.

type Bc: str. with a partition wall which is straight or curvilinear and demarcates a separate enclosed area reserved for storage or working activities. The examples come mainly from Cyprus (see app. V: table 3).

type Bd: str. with partition walls which form many separate rooms. Most examples come Levant and Greece (Knossos).

type Be: str. with partition walls which form successive rooms (known as the megaroid type, see Byrd and Banning 1988). Examples from Levant and Greece.

type Ca: str. with buttresses which are considered to support an upper storey. Most examples come from Cyprus (Khirokitia), but also in Levant.

type Cb: str. with basements, usually subterranean used for ventilation, storage or working activities. Most examples come from Anatolia and Levant (grill-plan and cell-plan str.)

type Cc: str. with evidence of staircases (obvious indication of the existence of an upper floor. Examples from Anatolia (Haçilar).

APPENDIX II

Typological classifications.

Khirokitia- Alain le Brun, east sector: number of features, finds and types of the information available in each phase.

	phase E	phase D	phase C	phase B	phase A
features					
no. of units	3	1	10	29	4
'hearths'	1 (1)	1 (1)	9 (2)	16 (3)	-
'platforms'	2 (1)	2 (2)	5 (2)	10 (3)	1 (1)
'fixed containers	1 (1)	- (0)	3 (3)	9 (3)	-
total no. of features	4	3	17	35	1
total no. of types	3	3	7	9	1
posts					
no. of units	-	-	4	8	-
no. of finds			12	1	
pits/*cuvettes*					
no. of units	-	-	4	8	-
no. of finds			2	2	
graves					
no. of units	-	-	4	8	-
no. of finds			2	-	

note: parenthesis includes the number of types identified in each of the three specific categories of features ('hearths', 'platforms', fixed containers')

Khirokitia- Alain le Brun, west sector: Depositional variability (features and finds per unit) in each phase (based on the information of the previous table)

	phase E	phase D	phase C	phase B	phase A
	finds /unit	finds /unit	finds /unit	finds /unit	finds /unit
features					
'hearths'	0.3	1	0.9	0.5	-
'platforms'	0.6	2	0.5	0.3	0.2
'fixed containers'	0.3	-	0.3	0.3	-
total	1.3	3	1.7	1.2	0.2
posts					
total	-	-	3	0.1	-
pits/*cuvettes*					
total	-	-	0.5	0.2	-
graves					
total	-	-	0.5	-	-

Khirokitia- Alain le Brun, west sector: number of features, finds and types of the information available in each phase.

	phase III	phase II	phase I
features			
no. of units	23	14	14
'hearths'	16 (3)	9 (3)	5 (2)
'platforms'	17 (2)	11 (3)	9 (2)
'fixed containers'	5 (1)	3 (1)	1 (1)
total no. of finds	38	23	15
total no. of types	6	7	5
posts			
no. of units	12	9	6
no. of finds	-	7	-
pits/*cuvettes*			
no. of units	12	9	6
no. of finds	1	2	1
graves			
no. of units	12	9	6
no. of finds	2	1	10

note: parenthesis includes the number of types identified in each of the three specific categories of features ('hearths', 'platforms', fixed containers')

Khirokitia- Alain le Brun, west sector: Depositional variability (features and finds per unit) in each phase (based on the information of the previous table)

	phase III	phase II	phase I
	finds / unit	finds / unit	finds / unit
features			
'hearth'	0.6	0.6	0.3
'platform'	0.7	0.7	0.6
fixed container'	0.2	0.2	0.07
total	1.6	1.6	1
posts			
total	-	0.7	-
pits/*cuvettes*			
total	0	0.2	0.1
graves			
total	0.1	0.1	1.6

Khirokitia-P.Dikaios: number of features, finds and types of the information available in each phase.

	phase I			phase II			phase III		
	east	west	total	east	west	total	east	west	total
features									
no. of units	1	10	**11**	16	71	**87**	11	3	**14**
'hearths'	1 (1)	10 (2)	**11 (2)**	5 (2)	30 (2)	**35 (2)**	6 (2)	1 (1)	**7 (2)**
'platforms'	1 (1)	8 (3)	**9 (3)**	12 (2)	45 (3)	**57 (3)**	4 (2)	0	**4 (2)**
'f. containers'	-	2 (1)	**2 (1)**	-	3 (2)	**3 (2)**	-	-	-
total no. of features	2	20	**22**	17	78	**95**	10	1	**11**
total no. of types	2	6	**6**	4	7	**7**	4	1	**4**
posts									
no. of units	-	7	**7**	7	22	**29**	2	1	**3**
no. of finds			-			-	15	-	**15**
pits									
no. of units	-	7	**7**	7	22	**29**	2	1	**3**
no of finds	-	4	**4**	2	17	**19**	1	-	**1**
graves									
no. of units	-	7	**7**	7	22	**29**	2	1	**3**
no. of finds		3	**3**	7	25	**32**	1	2	**3**
implements									
no. of units	-	7	**7**	7	22	**29**	2	1	**3**
no. of finds	-	8	**8**	4	25	**29**	3	-	**3**
no. of types	-	3	**3**	3	6	**7**	1	-	**1**
miscellaneous									
no. of units	-	7	**7**	7	22	**29**	2	1	**3**
no. of finds	-	4	**4**	-	7	**7**	-	-	-
no. of types	-	4	**4**	-	6	**6**	-	-	-
vessels									
no. of units	-	7	**7**	7	22	**29**	2	1	**3**
no. of finds	-	-	-	3	1	**4**	-	-	-
no. of types	-	-	-	1	1	**1**	-	-	-
other finds									
no. of units	-	7	**7**	7	22	**29**	2	1	**3**
no. of finds	-	5	**5**	2	4	**6**	2	-	**2**

Note: parentheses refers to the number of types identified in each of the three specific categories of features ('hearths', 'platforms', 'fixed containers')

Khirokitia-P. Dikaios: Depositional variability (features and finds per unit) in each phase (based on the information of the previous table).

	phase I		
	east sector	**west sector**	**total**
	finds / unit	finds / unit	finds / unit
features			
'hearths'	1	1	1
'platforms'	1	0.8	0.8
'f. containers'	-	0.2	0.1
total	2	2	2
posts total			
pits total		0.5	0.5
graves total		0.4	0.4
implements total		1.1	1.1
miscellaneous total		0.5	0.5
vessels total			
other finds total		0.7	

	phase II		
	east sector	**west sector**	**total**
	finds / unit	finds / unit	finds / unit
features			
'hearths'	0.3	0.4	0.4
'platforms'	0.7	0.6	0.6
'f. containers'	-	0	0
total	1	1	1
posts total			
pits total	0.2	0.7	0.6
graves total	1	1.1	1.1
implements total	0.5	1.1	1
miscellaneous total		0.3	0.3
vessels total	0.4	0	0.1
other finds total	0.2	0.1	0.2

	phase III		
	east sector	**west sector**	**total**
	finds / unit	finds / unit	finds / unit
features			
'hearths'	0.5	0.3	0.5
'platforms'	0.3	0	0.2
'f. containers'	-	-	-
total	0.9	0.3	0.7
posts total	7.5		5
pits total	0.5		0.3
graves total	0.5	2	1
implements total	1.5		1
miscellaneous total			
vessels total			
other finds total	1		0.6

Sotira-P. Dikaios: number of features, finds and types of the information available in each phase.

	phase I	phase II	phase III	phase IV
features				
no of units	9	14	27	17
'hearths'	7 (2)	15 (2)	24 (2)	10 (2)
'platforms'	6 (2)	23 (3)	42 (3)	6 (3)
fixed containers'	- (0)	6 (1)	11 (1)	4 (1)
total no. of features	13	44	77	20
total no. of types	4	6	6	6
pits				
no. of units	7	9	21	5
no. of finds	4	10	16	-
posts				
no. of units	7	9	21	5
no. of finds	13?	35?	93	27
implements				
no. of units	7	9	21	5
no. of finds	5	180	110	17
no. of types	3	21	15	9
miscellaneous				
no. of units	7	9	21	5
no. of finds	-	14	2	-
no. of types	-	7	2	-
vessels				
no. of units	7	9	21	5
no. of finds	-	5	6	-
no. of types	-	1	2	-
other finds				
no. of units	7	9	21	5
no. of finds	1	15	9	3
pottery fragments				
no. of units	7	9	21	5
no. of finds	88	461	1.292	401

Note: parentheses refers to the number of types identified in each of the three specific categories of features ('hearths', 'platforms', 'fixed containers')

Sotira-P. Dikaios: Depositional and variability (features and finds per unit) in each phase (based on the information of the previous table).

	phase I	phase II	phase III	phase IV
	finds/ unit	finds/ unit	finds/ unit	finds/ unit
features				
'hearths'	0.7	1	0.8	0.5
'platforms'	0.6	1.6	1.5	0.3
'fixed containers'	-	0.4	0.4	0.2
total	1.4	3.1	2.8	1.1
pits				
total	0.5	1.1	0.7	-
posts				
total	1.8	3.8	4.4	5.4
implements				
total	0.7	20	5.2	3.4
miscellaneous				
total	-	1.5	0	-
vessels				
total	-	0.5	0.2	-
other finds				
total	0.1	1.6	0.4	0.6
sherds				
total	12.5	51.2	61.5	80.2

Ayios Epiktitos- Vrysi: E. Peltenburg: number of features, finds, and types of the information available in each phase.

	early phase	middle phase			late phase
	north sector	north sector	south sector	total	south sector
features					
no. of units	4	7	16	23	3
'hearths'	4 (1)	10 (2)	20 (3)	30 (3)	1 (1)
'platforms'	6 (3)	8 (3)	20 (4)	28 (4)	5 (3)
'containers'	2 (2)	1 (1)	8 (1)	9 (2)	1 (1)
total no. of features	12	19	48	67	7
total no. of types	6	6	8	9	5
pits					
no. of units	4	4	10	14	2
no. of finds	1	3	4	7	4
posts					
no. of units	4	4	10	14	2
no. of finds	4	5	67	72	1
implements					
no of units	4	4	10	14	2
no. of finds	68	71	51	122	1
no. of types	12	10	12	13	1
miscellaneous					
no. of units	4	4	10	14	2
no. of finds	37	11	27	38	1
no. of types	8	5	7	7	1
vessels					
no. of units	4	4	10	14	2
no. of finds	12	4	5	9	2
no. of types	3	2	3	3	1
other finds					
no. of units	4	4	10	14	2
no . of finds	9	17	13	30	4

Note: parentheses refers to the number of types identified in each of the three specific categories ('hearths', 'platforms' , 'fixed containers')

Ayios Epiktitos-Vrysi: E. Peltenburg: Depositional variability (finds per unit) in each phase (based on the information of the previous table).

	early phase	middle phase			late phase
	north sector	north sector	south sector	total	south sector
	finds / unit	finds / unit	finds / unit	finds / unit	finds / unit
features					
'hearths'	1	1.4	1.2	1.5	0.3
'platforms'	1.5	1.1	1.2	1.6	1.6
'f. containers'	0.5	0.1	0.5	0.3	0.3
total	3	2.7	3	2.9	2.3
pits					
total	0.2	0.7	0.4	0.5	2
posts					
total	1	1.2	6.7	5.1	0.5
implements					
total	17	17.7	5.1	8.7	0.5
miscellaneous					
total	9.2	2.7	2.7	2.7	0.5
vessels					
total	3	1	0.5	0.6	1
other finds					
total	2.2	4.2	1.3	2.1	2

note: 'f. containers' = fixed containers

APPENDIX IV

Distribution of features and finds in completely excavated, preserved and 'undisturbed' units.

APPENDIX V

Database: contextual information from Khirokitia, Sotira and Ayios Epiktitos.

Introduction

The aim of the present section is to present the typological classification of features and finds in each publication, and explain the way in which each particular typology is used in order to serve the purpose of the present research.

As it became clear for the relevant section in chapter III, in archaeology there is usually a confusion about what particular typologies actually mean and represent, while functional comparisons are often assumed and implied by the morphology of features and finds. Consequently, the language used to define different types of features and finds in publications is either descriptive (morphological/stylistic) or interpretative (functional). Such an approach makes any kind of spatial analysis very difficult, because in 'descriptive' typologies, functional information is lacking, while in 'interpretative', analogy is assumed, without any effort to explain the 'rational' behind specific identifications.

Despite the importance of this problem, the evaluation and testing of the validity of typological terms should be rather left to the specialists. The present research examines the evidence available in each publication, and takes 'for granted' the function attributed to them by the director/researcher of each project. The information is divided deliberately into broad categories, such as : 'hearths', 'platforms', 'fixed containers' (for features) and 'implements', 'miscellaneous', 'vessels' and 'other finds' (for finds) in order to be flexible for the general assessment of the material which is attempted in level I of the analysis (see also app. III). Detailed information related to specific floors is provided in app. IV. and the database (app. V).

It is hoped that apart from serving the purpose of the present analysis, this particular section could provide a frame of assessing the practicality of different typologies in each site and could also help identify the problems and inadequacies in particular ways of presenting and treating the archaeological evidence.

Some of the points on which the following section refers to are:

- the recording system followed by each excavator, in order to understand what the finds represent
- information about the typological classification used in the publications and what functional implications this has for the material
- typological distribution of features and finds in each phase of each site
- specific problems and inconsistencies which should be taken into consideration

Khirokitia - Vouni (Alain Le Brun 1984, 1989, 1994)

Due to the fact that this project is still in progress, the information about finds is not yet available. However, the information about stratigraphy is exceptionally well presented and described, and as long as evidence about the size of structures and their furnishings is provided, we shall proceed to the analysis with the information about finds pending.

Although the features are presented in a separate section, their description does not refer to their possible function but rather provides measurements and an account of their morphological characteristics along with their distribution in the settlement.

The types of features identified on the site are:

Type	Function	Description / comments
hearths		mainly rectangular platform
fireplaces		
firepits		
platforms	sitting, sleeping?	mainly of *pisé*
benches		mainly of stone
pavings		
basins		
stone settings		depressions lined with stones
depressions		
cuvettes/pits		mainly lined with plaster

The distribution of these features in the settlement is the following:
For the East sector:

features	Phase E	Phase D	Phase C	Phase B	Phase A
'hearths'					
hearth			+	+	
fireplace	+	+	+	+	
firepit				+	
'platforms'					
platform	+	+	+	+	
bench				+	
paving		+	+	+	+
'fixed containers'					
basin	+		+	+	
depression			+	+	
stone setting			+	+	
total no.	3	3	7	9	1

For the West sector:

features	Phase III	Phase II	Phase I
'hearths'			
hearth	+	+	+
fireplace	+	+	
firepit	+	+	+
'platforms'			
platform	+	+	+
bench	+	+	+
paving		+	
'fixed containers'			
basin	+	+	+
depression			
stone setting			
total no.	6	7	5

Khirokitia - Vouni (P.Dikaios 1953)

Although in this publication the description and presentation of stratigraphic sections and sequences seems to be quite problematic (with discrepancies and omissions), finds were recorded by floor (1953:9), and it is therefore possible to attempt a 'contextual' approach. The description of the different types of features and finds found on the site is very brief and it is mainly an account of their distribution on specific floors and structures. At this point there is no distinction between east and west sector (for that information see app. III).

Features (Dikaios 1953:203-227):

The features identified on the site are:

Type	function	comments
hearths		I - VI types identified, all well defined
carbonised areas		
built seats	sitting	slabs
platforms	sitting-sleeping	circular or rectangular
paved areas	'table-spaces'	rectangular, made of *pisé* and/or stones, lined with *pisé*
basin	containers?	(no special reference but included in the text, also found by Le Brun)
depressions	stabilisers? container?	(no special reference but included in the text, also found by Le Brun)

As already mentioned, the information about features is divided into three main categories for the purpose of the present analysis: 'hearths', 'platforms', and 'fixed containers'. According to these, the distribution of features in each particular phase and sector is the following :

features	phase I	phase II	phase III
'hearths'			

hearth	+	+	+
carbonised area	+	+	+
'platforms'			
built seats	+	+	+
platforms	+	+	-
paved areas	+	+	+
'fixed containers'			
basin	-	+	
depression	+	+	-
'unidentifiable'			-
(row of boulders)	(+)	(+)	(+)
total in no.	**6**	**7**	**4**

note: 'row of boulders' are not included in the analysis because their function can not be identified.

Finds (Dikaios 1953:232-292):

Finds are divided into three mainly categories: 'implement': tools and chipped stone, 'miscellaneous': ornaments and in general finds that their use is uncertain, and 'vessels': complete vessels made of stone or clay. Apart form these categories there is also one which includes broken, unfinished or unidentifiable objects: 'other finds'.

Once again the description of the different types of objects, refers mainly to their morphological characteristics and examines their distribution on floors and structures. No particular section refers to their function.

A list of the main types of 'implements' identified on the site, would include (Dikaios 1953:259, 277-284):

type	function	comment
pounder		surface peaked all over
querns		
axe-head	cutting	8 types identified
chisel		polished surface and a cutting edge
spindle-whorls		three types
needles		
mortar		VI types identified, traces of ground, peaked
flake		

Their distribution by phase and sector is:

implements	**phase I**	**phase II**	**phase III**
pounder	+	+	+
flake	+	+	
spindle whorls	+		
quern		+	
awl		+	
axe		+	
needle		+	
mortar/small mortar		+	
total	**3**	**7**	**1**

The list of ornaments and miscellaneous objects found on the site includes (Dikaios 1953:285-290):

	function	comments
pin		
bead		
dentalium		
engraved pebbles	seals for stamping bread?	two types
handle		
idol		
conical stones	pounding? , sealing? symbolic?	four types
horn-shaped object		

miscellaneous	Phase I	Phase II	Phase III
pin	+	+	
bead	+	+	
dentalium	+		
engraved stone		+	
handle		+	
idol		+	
conical stone		+	
horn-shaped bone	+		
total	4	6	-

Vessels: the only example of vessels comes from phase II: 4 stone bowls (see app. V).

'Other objects': These objects include: shells, antlers, animal bones, unfinished bowls, miniature bowls, frag. of stone bowls, sherds.

Sotira - Teppes (P. Dikaios, 1961)

The finds in this publication were recorded according to house and floor (Dikaios 1961:4 - 5), and were divided into two main categories: those found on floors (including sherds), and those found between floors. Judging from the text and the description of each house, the majority of finds were simply associated to floors, while in the cases were artefacts were found *in situ* they were mentioned separately.

The present analysis concentrates only on the finds associated to particular floors. The number of sherds although recorded in appendix III, is not examined at this level.

Features: (Dikaios 1961: 158-165)

types	function	comments
hearth	-	several types (total 6)
fireplace	-	type 1: area showing carbonisation
boulder/slabs	seats	large stone or mass of rock
platform/bench	seats	mud and stone
paved area	table space, seats, supports for querns,	paved with slabs and flat stones
trough	storing grain or bread making	

Platforms and benches are in the same category but in general platforms seem to be better constructed. Slabs or boulders are interpreted either as seats or as supports for querns. In the database they are merely referred to as slabs. Trough are recorded in the database as 'bins'.

Features	Phase I	Phase II	Phase III	Phase IV
'hearths'				
hearth	+	+	+	+
fireplace	+	+	+	+
'platforms'				
slabs	+	+	+	+
bench		+	+	+
platform	+	+	+	+
'fixed containers'				
trough		+	+	+
'unidentifiable'				
('stone settings')		(+)	(+)	(+)
total	4	6	6	6

note: in this case 'stone settings' are not included in the analysis because they vary morphologically and they do not indicate one distinctive category.

Implements: (Dikaios 1961: 165-168, 188-204, 230-232)

Before we start the description it should be noted that there is not much information available about the function and definition of the different types of objects recovered in the excavation. The specific sections in which different finds are discussed focuses mainly on their distribution on the site and their division into stylistic subtypes. Not much reference is given to their function and their characteristics, both of which are presumed by their typological name. Comparisons, on stylistic grounds are usually made with Khirokitia (see above).

type	function	comments
needles		3 types identified
celts	as adze for cutting	andesite, surface usually pecked out , 6 types identified
chisels	cutting?	butt flat or round, cutting edge straight or convex; both from stone and bone
pestles	pounding	6 types identified
grinders	pounding / grinding	traces of use, 3 types identified
hammerstones	cutting?	usually of chalcedony, 3 types identified
quern	abrasion?	pecked surface, 3 types identified
polishers	polishing (pottery?)	usually pebbles
picks		deer antler
cores and flakes	waste material?	no traces of use
blades	knives/cutting, sewing	mainly two types: pointed and squarish; ethnographic parallel: pointed knife = men, squarish knife = women (Dikaios 1961:232)

It is important to note that although in the discussion about the flint industry there are only two types identified, in the actual description of the chipped stones found in each house, there seems to be a variety of blades with deferent morphological characteristics. The present analysis takes into account the more detailed information which derives from the inventories of the floors.
The same applies for other objects as well, as for example small celts, miniature pestles and chisels which are also recorded separately.
In the following section, the asterisk *: represents multi-functional objects (i.e. pestle/hammer).

implements	Phase I	Phase II	Phase III	Phase IV
needle		+	+	
pestle	+	+	+	+
miniature pestle				+
celt		+	+	+
small celt			+	
quern		+	+	
grinder	+	+	+	
hammer		+	+	+
polisher		+		+
chisel		+	+	
miniature chisel		+		
pick		+	+	
awl				+
core		+	+	
flakes		+	+	+
blades		+	+	+
retouched blades		+		
knife blades		+	+	
broad blades		+		
notched blades		+		
pointed blades		+		
sickle blades		+		
scrapers		+	+	

end - scrapers *	+	+	+	+
totals	**3**	**21**	**15**	**9**

Miscellaneous: (Dikaios 1961: 188 - 204)

The list provided in the relevant section is quite limited:

type	description	comments
pendants		picrolite or sandstone, 3 types identified
amulet	-	in the shape of celt
beads	-	2 types identified
handles	-	for stone or flint implements, made of antler
perforated disc	spindle-whorls?	roughly circular, with a perforation at the centre

Distribution of finds by phase:

miscellaneous	**Phase I**	**Phase II**	**Phase III**	**Phase IV**
handle		+	+	
pigment		+		
pendant		+		
idol		+		
pin		+	+	
perforated disc		+		
amulet		+		
totals	-	**7**	**2**	-

note: 'perforated disc': not included in implements because its use is uncertain

Pottery : (pp. 172-188)

Bowls were made of both clay and stone.

Pottery	Phase I	Phase II	Phase III	Phase IV
jug			+ (pottery)	
bowl		+ (stone)	+ (pottery)	
total	-	**1**	**2**	-

other objects : pointed tools, perforated stone, unfinished pendant, unfinished celt, part of celt, part of pestle.

Avios Epiktitos - Vrysi (E.J.Peltenburg 1982)

The recording system of this publication has been quite helpful for the extraction of spatial associations, as it provides detailed information about the way in which data was recorded and also yields distributional plans for each single floor. With regard to the terminology, helpful was also the morphological and functional comparison of the material culture with similar evidence from other sites.

Features:

Type	Function	description/comments
hearths	-	platforms with a hemispherical firepit
fireplaces	subsidiary /temporary fireplaces	in situ burning without demarcation
oven	-	hearth with a hole-mouth
slabs	portable seats?	single blocks of stone
benches	fixed seats	
platform	seats	stony platform
pebble pavings	hard-wearing surfaces	pebbles set closely together in a compact matrix of *pisé*
basins	fixed containers	sealed sides, concave bases

bins	-	flat based areas demarcated by orthostat slabs/ akin to basins
stone settings	stabilisers, seats, platforms for objects or post pads	stones deliberately set together

From the above, platforms and slabs, are not described in the functional description of the features in the publication (for features Peltenburg 1982:244-251), but are included in the description of each particular floor (ibid.:21-56), where they are considered as seats. In the present database they are recorded separately. Stone settings are not included in the analysis, because their use is too uncertain.

features	early/north	middle/north	middle/south	late/south
'hearths'				
hearth	+	+	+	+
fireplace		+	+	
oven			+	
'platforms'				
slab	+	+	+	
bench	+	+	+	+
platform			+	+
paving	+	+	+	+
'fixed containers'				
basin	+	+		+
bin	+		+	
'unidentifiable'				
(stone settings)	(+)	(+)	(+)	
total in no.	**6**	**6**	**8**	**5**

Implements

Type	Function	Description/Comments
bone and antler points	needles / borers	pierced near the butt, flat section
hooks (bone)	fish hooks	vertical shanks pierced at the thickened terminal and points looped
burnishers (bone)	-	sturdy long bones with working terminal bevelled to a fine blade (Sotira described as chisels)
pestles	grinding/hammering	tapered cylinders with the frequently oblique working surface at the thicker end
grinders and hammerstones	grinding/hammering	plano-convex pebble; traces of grinding, polishing, pecking
rubber	grinding/hammering	one plano-convex stone with round or squared terminals, or one cylindrical stone with one face smoothed from use (Sotira: equivalent to quern types I and II)
axes, adzes and chisels	cutting	ground on the upper body and polished near the blade
sharpeners (sharpening slabs)	-	limestone slabs or blocks with narrow grooves and channels
querns	grinding/hammering	saddles with flat raised terminals at both ends of the concave working face (Sotira: equivalent to quern type III)
basins/troughs	abrasion or soft pounding	large stones with irregular plan; depressed to different depths (in Sotira interpreted as grain storage installations)
chipped stone (flint)		cores, scrapers ,blades
flaked blades or axe roughouts	parts of re-working process	blades flaked around the perimeter

'Basin/trough' are included in the implements, on the ground that their traces of depression are considered to indicate abrasion. This despite the rather confusing recording in the publication, where although their function is associated to abrasion (Peltenburg 1982:318), in the plans (ibid.:253) they are classified under containers.

In the following table, the asterisk (*) indicates multi-functional objects.

implements	early/north	middle/north	middle/south	late/south
1) needle	+	+	+	
2) hooks	+			
3) burnisher	+			
4) pestle	+	+	+	
5) grinder	+		+	
6) hammer		+	+	
7) rubber	+	+	+	
8) axe	+	+	+	+
9) adze	+			
10) chisel	+	+	+	
11) sharpener	+			
12) quern		+	+	
13) basin/trough	+		+	
14) core		+		
15) flake			+	
16) blade		+	+	
17) *	+	+	+	
total in no.	**12**	**10**	**12**	**1**

Miscellaneous:

Type	Function	Description/Comments
beads (bone/antler, stone)	-	cylindrical, disc or ring in shape
drilled discs	?	pottery fragments roughly trimmed into drilled disc shapes
lamps	-	calcarenite blocks with a single hemispherical socket pecked into one face
plugs/studs (pottery)	-	nail-shaped objects
macehead	?	pierced flag sphere of polished blue-grey adamellite
organic material	mat	silicates of finely coiled grass/ occur in circles
toggles (bone/ antler)	-	pierced with holes larger than in needles (Sotira: one example as pendant, Anatolia: belt plaques)
sleeves (antler)	intended for blades or chisels, presumably mounted in an assemblage in a wooden handle	antlers with sockets
pick (bone, antler)	-	several blunted tine tips which may come from picks
figurine	religious significance?	roughly squared pillar with flat base and wide sloping groove near its bluntly tapered top/phallic representation
socketed stones	several functions (original function as mortars? but also pivots/ post-sockets)	irregular, untrimmed stones with one or more sockets on a main face

Socketed stones are not recorded here as miscellaneous because although 'the original function of most is likely to have been as mortars' (Peltenburg 1982:318), they are considered to be used and re-used for several purposes (e.g. pivots, as in the case of B6 fl. 2 : pp: 346 register no. 721, pp.: 283 fig. 44). Consequently they are recorded in the category of 'other finds'.

miscellaneous	early/north	middle/north	middle/south	late/south
1)bead	+	+	+	
2)disc	+	+	+	
3)pierced disc			+	
4)lamp	+	+	+	
5)plug	+	+	+	+
6)toggle	+			
7)sleeve	+			
9)figurine	+			
10)mat	+	+	+	
11)macehead			+	
total in no.	**8**	**5**	**7**	**1**

Vessels:

vessels	early/north	middle/north	middle/south	late/south
bowl	+ (pot/stone)	+ (stone/shell)	+ (stone/pot)	
jug	+ (pot)		+ (pot)	+ (pot)
jar	+ (pot)			
tray - CW		+ (pot)	+ (pot)	
total in no.	**3**	**2**	**3**	**1**

other finds: socketed stones, worked bones, worked stones, flaked tools, ring-cut bones, pierced stones, worked antlers.

table 8: size and segmentation types.

Note : types of segmentation: A: no partition, A': no partition but adjacent to another unit, Ba: partition wall, Bb: low partition (ridge), Bc: partition wall froming an enclosed area, Ca: pillar/ butress. [see also app. I]

UNIT	FLOOR SPACE	TYPES
Khirokitia (Le Brun) - east sector		
1'	8.30?	Ca
2'	8.30?	Ca
3'	8.30?	Ca
4'	12.25	Ca
5	16.66	Ca/Bb
6	16.95	Ca/Bb
7	2.40	A
8'	2.40	A
9'	12.10	Ca
10	12.10	Ca/Ba
11'	4.15	Ba
12'	4.15	Ba
13'	4.15	A
14'	4.15	A
15'	?	Ca
16'	2.40	Ba
17'	2.00?	A
18'	2.00?	A
19'	5.95?	A
20'	7.55?	A
21'	7.55?	A
22'	7.55?	A
23'	12.00	Ba
24'	12.00	A
25'	4.30?	A
26	7.15	A
27	7.15	Ba/Bb
28	3.38	Ba
29	3.88	Bb
30	3.88	A
31	3.46	A
32'	4.50?	A
33'	4.50?	A
34'	3.80	A
35	2.83	Ca
36'	5.72?	A
37'	4.90?	A
38'	4.90?	A
39'	4.90?	A
40'	2.30?	A
41	4.24	A
42'	9.00?	A
43'	9.00?	A
44'	5.95	Ca?
45'	4.30?	A
46'	3.14?	A
47'	3.80?	A
Khirokitia (Le Brun) -west sector		
1	2.38	Ba
2'	3.65	Bb
3'	3.65	A
4'	3.45	Ba
5	5.70	Ba
6	5.70	Ba

UNIT	FLOOR SPACE	TYPES
7	4.50	Ba
8'	4.90	A
9	3.80	Ba
10	3.80	Ba
11	3.80	A
12'	8.55	Bc
13'	2.00?	A
14	2.00	A
15'	2.00	A
16	?	Ba
17'	2.00?	A
18'	2.00?	A
19	7.00?	Ca/Ba?
20'	7.00	Ca
21'	7.00	Ba
22	3.80	Ba
23	3,15	Ba
24	4.50	Bc
25	4.50	Bc
26	3.45	A
27'	5.30?	A
28	8.00	Bc
29'	8.00	Bc
30	6.60	A
31'	3.15	Ba
32	3,15	A
33'	8.55	Ba
34'	8.00	Bc
35	3.30	Ba
36	3.30	Ba
37	3.35	A
38	4.95	Bc
39	2.15	A
40'	1.90	Bc
41'	3.45	A
42	6.15	Ba
43	6.15	Ba
44'	4.15	A
45'	4.00	A
46	5.30	Ba
47	15.20	A
48'	10.20	A
49'	10.20	Ba
50'	8.55	A
51'	17.20?	A

Khirokitia (Dikaios) both sectors.		
1	>4.60	A
2	>4.60	A
3	>4.60	A
4	>5.70	A
5	>5.70	A
6'	>5.70	A
7	5.70	A
8	5.70	A
9'	11.20	Ba/Bb
10'	11.20	A
11'	>2.50	A?
12'	26.60	Ca
13'	26.60	Ca
14'	30.40	Ca
15'	30.40	Ca
16	30.40	Ca
17'	4.00	A?
18'	2.00	A?
19'	8.00	A?

UNIT	FLOOR SPACE	TYPES
20	8.00	A?
21'	9.00	A
22	9.00	A
23'	5.00	A
24	4.50	A
25	4.50	A
26'	4.50	Bc
27	4.50	Bc
28	4.50	A
29'	4.50	A
30	1.80	A
31'	1.50	A
32'	1,5	A
33'	7.40	A
34'	7.40	A
35	5.40	Bc
36	5.40	A
37'	6.20	A
38'	6.20	A
39'	5.80	A
40	5.80	Ba
41	5.80	A
42'	5.80	A
43'	5.00	A
44	5.00	A
45'	4.60	Bc
46'	4.60	A?
47	6.80	A
48'	6.80	Ba?
49'	4.00	A'?
50	4.00	A'
51	4.00	A'
52'	4.00	A'
53'	4.00	A'
54	4.00	A'
55'	5.70	A'
56'	5.70	A'?
57'	5.70	A'
58'	7.70	A'
59'	7.70	A'
60'	7.70	A'
61'	5.50?	A'
62'	5.50?	A'
63'	20.90	A?
64'	20.90	A?
65'	15.00	A
66'	15.00	A
67'	15.00	A
68'	15.00	A
69	17.20	Ca
70	6.50	Ba
71	11.00	Ba?
72'	11.00	A?
73'	9.90	A
74	6.10	Ca
75	6.10	Ca/Ba
76'	6.10	Ca/Ba
77'	15.40	A
78'	15.40	A
79'	15.40	A
80	6.10	Bc
81'	3.70	A'/Ca
82	3.70	A'/Ca
83	3.70	A'
84'	3.00	A'
85'	3.60	A'

UNIT	FLOOR SPACE	TYPES
86'	7.00	A?
87'	6.30	A
88'	17.10	Ca?
89'	17.10	Ca?
90'	17.10	A?
91'	8.60	A
92'	8.60	Ca/Ba
93'	8.60	A?
94'	8.60	Bc
95'	8.60	Ca
96	8.60	Ca
97'	8.60	A?
98'	8.60	A?
99'	7,4	A
100'	5,1	A?
101	7.80	A
102	7.80	A
103'	7.80	Ca
104'	14.60	Ba?
105	6.00	A
106'	10.00	A
107'	10.00	A
108'	7.10	A'?/Ba
109'	7.10	A'?
110'	7.10	A'?
111'	3.70	A'?
112'	3.00	A'?

Sotira (Dikaios)		
1	8.60	Bc/A'?
2	8.60	Bc/A'?
3'	12.00?	A'?
4	>4.60	A'
5	>8.20	Bc/A'
6	>8.20	A'
7'	>5.90	A'
8	>5.90	A'
9	>8.20	Bc/A'
10	27.60	A'
11'	27.60	A'
12'	>8.00	A'
13'	7.50?	A'
14	11.30	A'
15	17.10	A
16	17.10	A
17	20.70	Bc
18	20.70	Bc
19	20.30	A
20	20.30	A
21'	24.00?	A?
22'	24.00?	A?
23	7.50	A'
24	9.10	Bc
25'	19.20?	A'
26	16.90?	Bc/A'
27'	9.90	A'
28	27.30?	A'?
29	15.30	Bc/A'?
30	18.00	Bc/A'
31	12.30	A'
32	29.30?	Bc
33	14.30?	A'
34'	4.90	A'
35	7.50	A'
36	19.80?	Bc
37	21.50?	A'?

UNIT	FLOOR SPACE	TYPES
38'	21.50?	A'?
39	16.50?	A'?
40	9.70	A
41'	21.50?	A'
42	7.10	A
43	>12.10	A'?
44	>5.20	A'?
45	5.80	A'
46	7.40	Ba/A'
47	10.70	A'
48	10.70	A'
49	13.70?	A'
50'	5.80	A'
51'	27.60	A
52	11.30	A'
53'	17.11	A
54'	20.70	A
55'	9.10	Bc
56	16.90?	A'
57'	27.30?	A'
58'	15.30	A'
59'	18.00	Bc/A'
60'	12.30	A'
61'	29.30?	A
62	14.30	A'
63'	7.50	A'
64'	16.50?	A'
65'	9.70	A
66	>12.10	A'
67	5.80	A'

Ayios Epiktitos - Vrysi (Peltenburg)		
1	>10.70	A
2	>10.70	A
3	>10.70	A
4	16.00?	A
5	12.60	A
6'	12.60	Ba
7	18.00	A
8	18.00	A
9'	>13.00	A
10	>13.00	A
11'	>10.50	Ba
12	>13.00	Ba/A'
13	13	Ba/A'
14	15.60	Bc/A'
15	15.60	A'
16	7.20	Bc/A'
17'	7.20	A'
18	7.20	A'
19	7.20?	A'
20'	7.50	A
21	7,5	A
22	7,5	A
23'	7,5	A
24'	7.50?	A
25'	22.00	A'
26	9.00	A'
27'	9.00?	A'
28'	7.20?	A'
29	27.00	A'
30	25.00	A'

APPENDIX III

Distribution of features and finds in each site.

Khirokitia - (Le Brun 1977-1991)

east sector / Phase C

buildings:	S. 117		S. 118	S. 122
units:	5	6	7	10
features				
'hearth'				
hearth	1	1		1
carbonised area			1	
'platform'				
platform		1		1
paving	1			
'container'				
basin	1			
total no.	3	2	1	2
no. of types	3	2	1	2

buildings:	S. 117		S. 118	S. 122
units:	5	6	7	10
posts				12
'cuvettes'/pits				2
graves				2

east sector / Phase B

buildings:	S. 125			S. 126			S. 131	S. 137
units:	26	27	28	29	30	31	35	41
features								
'hearth'								
hearth	1	1	1	1	1		1	1
carb.area						1		
'platform'								
platform	1	2	1					
bench					1	1		
'container'								
total no.	2	3	2	1	2	2	1	1
no. of types	2	2	2	1	2	2	1	1

posts : unit 26 - 1 post
pits: unit 26 - 2 pits
graves: -

west sector / Phase III

buildings:	S. 85	S. 87		S. 94			S. 108
units:	1	5	6	9	10	11	23
features							
'hearth'							
hearth	1			1	1	1	1
carbon. area			1				
'platform'							
platform	1	1		1	2	1	1
bench				1	1	2	1
'container'							
basin		1	1				
total no.	2	2	2	3	4	4	3
no. of types	2	2	2	3	3	3	3
features/type	1	1	1	1	1.3	1.3	1

posts: -
pits: -
graves: -

west sector / Phase II

buildings:	S. 84		S. 85	S. 89	S. 94	S. 102		
units:	24	25	26	30	32	35	36	37
features								
'hearth'								
hearth	1	1	1					1
carb. area							1	
'platform'								
platform	1		1			1		1
bench				1	1			
'container'								
basin		1						
total no.	2	2	2	1	1	1	1	2
no. of types	2	2	2	1	1	1	1	2

buildings:	S. 84		S. 85	S. 89	S. 94	S. 102		
units:	24	25	26	30	32	35	36	37
posts							7	
pits						1	1	
graves								

west sector / Phase I

buildings:	S. 82	S. 83	S. 89		S. 95
units:	38	39	42	43	46
features					
'hearth'					
hearth	1		1	1	
'platform'					
platform	1			1	
bench			1		1
'container'					
basin				1	
total no.	2	-	2	3	1
no. of types	2	-	2	3	1

posts: -
pits : -
graves : unit 38 - 1 grave
unit 42 - 7 graves

Khirokitia - (Dikaios 1953)

Phase I / west sector

Unit 7 , Building BX (IV) , Fl. XII
Size : 5.70 m² **segmentation type :** A (no partitions)
features : 2 hearths , 1 fireplace
3 graves
implements : -
miscellaneous: -

vessels : -
other finds: 1 frag. of stone bowl

Phase II /east sector

buildings:	BVIII (II)	BXXII (II)		BXXVI (II)	BXXVII (I)		BXXIX (II)
units:	44	70	71	80	82	83	85
Features							
'hearths'		1					
hearth							
'platforms'							
platform							1
paving				1		1	1
'containers'							
total no.	-	1	-	1	-	1	2
no. of types	-	1	-	1	-	1	2

buildings:	BVIII (II)	BXXII (II)		BXXVI (II)	BXXVII (I)		BXXIX (II)
units:	44	70	71	80	82	83	85
posts							
pits		1		1			
graves	2	1	2	1	1		

note: pits: lined /animal bones , pebbles (unit 70), lined/? (unit 80)

buildings:	BVIII (II)	BXXII (II)		BXXVI (II)	BXXVII (I)		BXXIX (II)
units:	44	70	71	80	82	83	85
implements							
pounder		1					
mortar		1				1	
quern							1
total no.	-	2	-	-	-	1	1
no./ of types	-	2	-	-	-	1	1

miscellaneous: -
vessels: unit 70 : 3 stone bowls

building:	BVIII (II)	BXXII (II)		BXXVI (II)	BXXVII (I)		BXXIX (II)
unit:	44	70	71	80	82	83	85
other finds		1	1				

note: other finds: frag. of bowl, part of axe

Phase II / west sector

buildings:	BIA (II)	BXIIA (II)	BIII (I)					BXXIV (I)	
units:	16	22	24	25	27	28	30	74	75
features									
'hearth'									
hearth	1				1	1	1	1	1
fireplace	1								
'platform'									
platform						4			
paving		1			1				
slab						2			
'container'									
('other')									
row of stones							(1)		
total no.	**2**	**1**	-	-	**2**	**7**	**1**	**1**	**1**
no. of types	**2**	**1**	-	-	**2**	**3**	**1**	**1**	**1**
features/type	**1**	**1**	-	-	**1**	**2.3**	**1**	**1**	**1**

building:	BV				BX (III)	BXV (II)			BXX (I)	BXLVII
unit:	35	36	40	41	47	50	51	54	69	96
features										
'hearth'										
hearth	1	1		1		1				1
fireplace						1?				
'platform'										
platform			1						1	
paving				1					2	
slab						2				1
'container'										
total no.	**1**	**1**	**1**	**2**	-	**4**	-	-	**3**	**2**
no. of types	**1**	**1**	**1**	**2**	-	**3**	-	-	**2**	**2**
features/type	**1**	**1**	**1**	**1**	-	**1.3**	-	-	**1.5**	**1**

posts : -

building:	BIA (II)	BXIIA (II)	BIII (I)					BXXIV (I)	
units:	16	22	24	25	27	28	30	74	75
pits		2			1			2	
graves	1	4			3				

note: content of pits: unit 22 (boulders of small size), unit 27 (dark earth, bones, flints and pebbles), unit 74 (earth filling)

buildings:	BV				BX (III)	BXV (II)			BXX (I)	BXLVII
units:	35	36	40	41	47	50	51	54	69	96
pits			1		7	2		1		
graves			3	1	3			1	4	4

note: content of pits: unit 40 (lined/bones, flints, pebbles, charcoal), unit 47 (pebbles, ashes, charcoal), unit 50 (lined/ pebbles, ashes, animal bones, flints, animal needle), unit 54 (pebbles, ashes)

buildings:	BIA (II)	BXIIA (II)	BIII (I)					BXXIV (I)	
units:	16	22	24	25	27	28	30	74	75
implements									
pounder		2			2				
awl		1							
axe		1							
flake		2?							
no. of finds	-	6	-	-	2	-	-	-	-
no. of types	-	4	-	-	1	-	-	-	-
finds/type	-	1.5	-	-	2	-	-	-	-

buildings:	BV				BX (III)	BXV (II)			BXX (I)	BXLVII
units:	35	36	40	41	47	50	51	54	69	96
implements										
pounder	1								1	
flake						5			1	
needle						1				
awl								1		
no. of finds	1	-	-	-	-	6	-	1	2	-
no. of types	1	-	-	-	-	2	-	1	2	-
finds/type	1	-	-	-	-	3	-	1	1	-

buildings:	BIA (II)	BXIIA (II)	BIII (I)					BXXIV (I)	
units:	16	22	24	25	27	28	30	74	75
miscellaneous									
handle		1							
bead			1						
total no.		1	1						
no. of types	-	1	1	-	-	-	-	-	-

buildings:	BV				BX (III)	BXV (II)			BXX (I)	BXLVI I
units:	35	36	40	41	47	50	51	54	69	96
miscellaneous										
fiddle -shaped stone		1								
conical stone										1
engraved stone										1
pin							1			
total no.	-	1	-	-	-	-	1	-	-	2
no. of types	-	1	-	-	-	-	1	-	-	2

vessels: -
other finds: unit 36 - frag. of bowl
unit 69 - frag. of bowl

Phase III / units 101, 102: east sector ; unit 105 : west sector

buildings:	BVII (I)		BX (I)
units:	101	102	105
features			
'hearth'			
hearth		1	
fireplace	1		
'platform'			
paving		1	
'container'			
-			
total no.	1	2	-
no. of types	1	2	-

buildings:	BVII (I)		BX (I)
units:	101	102	105
posts	6	9?	
pits		1	
graves	1		2

note: content of pits: unit 102 (lined/?)

buildings:	BVII (I)		BX (I)
units:	101	102	105
implements			
pounder	1	2	

miscellaneous: -
vessels: -
other finds:
unit 102: 1 unfinished bowl
1 unfinished axe

Sotira - Teppes (Dikaios 1961)

Phase I

building:	B36	
unit/floor:	1	2
features		
hearth	1	
fireplace		1
platform	1	

other finds: - 1 pointed tool

Phase II

building:	B1	B6	B3		B5		B7		B17
unit:	10	14	15	16	17	18	19	20	23
Features									
'hearths'									
hearth	1		1	2	1	3	1	1	
fireplace							1		1
'platforms'									
slabs	4			2		3	2	1	1
bench						1		1	
platform					1				
'containers'									
bin					1	1	1	1	
('other')									
stone setting					(1)				
total no.	5	-	1	4	3	8	5	4	2
no. of types	2	-	1	2	3	4	4	4	2
features/type	2.5	-	1	2	1	2	1.2	1	1

buildings:	B1	B6	B3		B5		B7		B17
units:	10	14	15	16	17	18	19	20	23
implements									
needle			1				1		
pestle				3	4	2	1		
celt	1			14	2	5		2	
quern				1		2			
grinder				2		4			
hammer				2		1		1	
polisher				1					
chisel							1	1	
pick							1		
core				7			2	3	

flakes			1?	42	1	5	7 ?		
knife blades	2			3			1		
broad blades	1								
notched blades	1								
pointed blades	4			5					
retouched blades							1	1	
sickle blades				2					
blades				10		4	4	4	
scraper							2		
end-scraper	1			2					
miniature chisel	1							1	
no. of finds	**11**	-	**2**	**104**	**7**	**23**	**21**	**14**	-
no. of types	**7**	-	**2**	**13**	**3**	**7**	**10**	**7**	-
finds/type	**1.5**	-	**1**	**8.6**	**2.3**	**3.2**	**2.1**	**2**	-

buildings:	B1	B6	B3		B5		B7		B17
units:	10	14	15	16	17	18	19	20	23
miscellaneous									
handle	1							1	
pin							1		
pigment			2						
perforated disc				1			1		
pendant				1		1	1		
amulet								1	
idol						1			
no. of finds	**1**	-	**2**	**2**	-	**2**	**3**	**2**	-
no. of types	**1**	-	**1**	**2**	-	**2**	**3**	**2**	-
no./type	**1**	-	**2**	**1**	-	**1**	**1**	**1**	-

building:	B1	B6	B3		B5		B7		B17
unit:	10	14	15	16	17	18	19	20	23
vessels									
bowls	1	1	2	-	-	1	-	1	-

Note: all stone bowls underlined; pottery vessels not underlined

building:	B1	B6	B3		B5		B7		B17
unit:	10	14	15	16	17	18	19	20	23
other finds	1	1	1	4	2	1	6	1	-
sherds	5	-	1	256	-	-	155	1	13

note: other finds: deer's antler, pebbles (red jasper), unfinished ornaments?, pebbles with traces of use, perforated stone

Phase III

building:	B2	B11	B12	B16	B14	B17	B24	B30	B31	B31A	
unit:	24	29	30	31	33	35	42	45	46	47	48
Features											
'hearth'											
hearth	1	1		1	2			1			
fireplace			1								1
'platform'											
slabs	2	2	3?				1	1			
bench							1				
platform	1				1		2				
'containers'											
bin	1		1?				1			1	
total no.	**5**	**3**	**5**	**1**	**3**	-	**5**	**2**	-	**1**	**1**
no. of types	**4**	**2**	**3**	**1**	**2**	-	**4**	**2**	-	**1**	**1**
features/type	**1.2**	**1.5**	**1.6**	**1**	**1.5**	-	**1.25**	**1**	-	**1**	**1**

building:	B2	B11	B12	B16	B14	B17	B24	B30	B31	B31A	
unit:	24	29	30	31	33	35	42	45	46	47	48
implements											
needle		1								1	
pestle		1			1		1				
celt		1	3			1					
grinder	1										
chisel			1								
small celt					1						
core					1						
flakes		5			16						
end - scraper					1						
knife blade					1						
scraper				1							
blades	1?		3		5						
total no.	2	8	7	1	26	1	1	-	-	1	-
no. of types	2	4	3	1	7	1	1	-	-	1	-
finds/type	1	2	2.3	1	3.7	1	1	-	-	1	-

building:	B2	B11	B12	B16	B14	B17	B24	B30	B31	B31A	
unit:	24	29	30	31	33	35	42	45	46	47	48
miscellaneous											
handle	-	1									

building	B2	B11	B12	B16	B14	B17	B24	B30	B31	B31A	
unit:	24	29	30	31	33	35	42	45	46	47	48
vessels											
bowl					1						
jug					1						

Note : all pottery

building:	B2	B11	B12	B16	B14	B17	B24	B30	B31	B31A	
unit:	24	29	30	31	33	35	42	45	46	47	48
other finds	-	1	2	-	-	-	-	1	-	-	-
sherds	4	26	89	185	297	-	-	-	-	-	-

note: other finds: goat's horns, deer's antler

Phase IV

building:	B6	B14	B30
unit:	52	62	67
features			
'hearth'			
hearth		1	1
fireplace	1		1
'platform'			
bench		2	
'container'			
bin		1	
no. of features	1	4	2
no. of types	1	3	2
features/type	1	1.3	1

buildings:	B6	B14	B30
units:	52	62	67
implements			
celt	1	1	
pestle		2	

polisher		1	
end-scraper		1	
flakes			2
blades			1
no. of finds	1	5	3
no. of types	1	4	2
no./type	1	1.25	1.5

miscellaneous: -
pottery: -
other finds: 1 frag. of celt, 1 part of pestle, 1 deer's antler

Ayios -Epiktitos Vrysi (Peltenburg 1982)

Middle phase

	north sector			south sector						
Buildings:	B1	B5		B2A		B2B		B3		B4B
Floors/units:	5	7	8	13	14	16	18	21	22	26
Features										
'hearths'										
hearth	1	1	1	1	2	1	2			1
fireplace					1			2		
oven								1		
'platforms'										
slabs		1		1				3		
bench	3		1		2	1		1	2	
paving		1			1					
'containers'										
bin					2	1		1		
('other')										
stone setting						(1)				
total no.	4	3	2	2	8	3	2	8	2	1
no. of types	2	3	2	2	5	3	1	5	1	1
features/type	2	1	1	1	1.6	1	2	1.6	2	1

	north sector			south sector						
Buildings:	B1	B5		B2A		B2B		B3		B4B
Floors/units:	5	7	8	13	14	16	18	21	22	26
Implements										
needle	6	4	6		2	2	1	4		
pestle	2	2			1	1		1		
grinder								6		
hammer		1						1		
rubber	1	11				1	2	7	1	
axe		12	1				1			
chisel	1	1								
quern	1						1	2	1	1
trough							1			
core	1	?								
flake					1					
blade	1						1	1		
*			1		1			1		
no. of finds	13	31	8	-	5	4	7	23	2	1
no. of types	7	6	3	-	4	3	6	7	2	1
finds/type	1.8	4.4	2.6	-	1.2	1.3	1.1	2.8	1	1

Note: *: adze/pestle (unit 8), rubber/adze (unit 14), grinder/hammer (unit 21)

	north sector			south sector						
Buildings:	B1	B5		B2A		B2B		B3		B4B
Floors/units:	5	7	8	13	14	16	18	21	22	26
miscellaneous										
bead	1		2		10	1	2			
disc	1	2				1				3
pierced disc								1		
lamp	1		1		1	1				
plug		1			3					
mat		1						1		
macehead									1	
no. of finds	3	4	3	-	14	3	2	2	1	3
no. of types	3	3	2	-	3	3	1	2	1	1
finds/type	1	1.3	1.5	-	4.6	1	2	1	1	3

	north sector			south sector						
buildings:	B1	B5		B2A		B2B		B3		B4B
units:	5	7	8	13	14	16	18	21	22	26
vessels										
bowl					1					
tray						1				
finds					1	1				
types					1	1				

Note: stone vessels are underlined, pottery not

	north sector			south sector						
buildings:	B1	B5		B2A		B2B		B3		B4B
units:	5	7	8	13	14	16	18	21	22	26
other finds	1	6	4	-	-	1	1	7	-	1

Note: other finds: worked stone, worked bone, socketed stone, stone slabs, ring-cut bone

Late phase / south sector

Unit 30, Building B4B

Size : 25.00 m², **segmentation type**: A'
Features: 2 cobbled areas
Implements: 1 axe
other finds: 4 socketed stones
pits: 2 pits (one filled with stones)

APPENDIX V

Database: contextual information from Khirokitia, Sotira and Ayios Epiktitos.

KEY for the categories in table 1:

Description: [: bedrock,
* : traces of occupation (no trace of walls)
A : single episode / living floor (undisturbed units)- ( )
B : disturbed / succession of floors / cut by pits/graves (but provide information about features, size and segmentation), (disturbed units)- (')
C : traces of occupation (too eroded and fragmented but with structural remains/walls)

End of occupation: A: burned/catastrophic
B: collapse of superstructure
C: levelled, re-surfacing
D: abandoned / (rubble)
E: eroded / disturbed (usually close to surface)
F: no information /unclear

Deposition: A: finds *in situ*
A': no finds *in situ*
B : identifiable patterns
B': scatter, no identifiable patterns
C : very few finds, cleared out floor

Comments: comments on the available information (omissions about sections and plans etc.)

Data quality control factors II (DQCF II : horizontal control):

A: excavated / preserved
B: partly excavated / preserved
C: excavated / partly preserved (eroded or cut by pits/graves)
D: partly excavated / partly preserved

Table 1: Stratigraphy and general assessment of the nature of the deposits: Data quality Control Factors: I and II

SITE	PHASE	BUILDING	FLOOR/LAYER	DESCRIPTION	UNIT	DQCFII	END OF OCCUPATION	NATURE OF DEPOSITION	COMMENTS
Khirokitia (Le Brun) - east sector									
CY.KH2	ENL.G/F	(B.116)	FL.?	[*		B	C		
CY.KH2	ENL.G/F	(B.129)	FL.?	? C					NOT EXCAV
CY.KH2	ENL.E?	(B.115)	FL.?	? *					
CY.KH2	ENL.E3	B.116	FL.752	B	1'	C	E		
CY.KH2	ENL.E2	B.116	FL.589	B	2'	C	C		
CY.KH2	ENL.E2	B.116	FL.588	B	3'	C	B?/E		
CY.KH2	ENL.E2	(122)	FL.?	? C					
CY.KH2	ENL.D2	B.115	FL.?	C		C	E		
CY.KH2	ENL.D	(B.117)	FL.?	? *					
CY.KH2	ENL.D	(B.118)	FL.?	? *					
CY.KH2	ENL.D	B.122	FL.831	B	4'	A	C		
CY.KH2	ENL.D?	B.141	FL.?	?C					NOT EXCAV
CY.KH2	ENL.C	B.117	FL.535	A	5	A	C		
CY.KH2	ENL.C	B.117	FL.492	A	6	A	D/C		
CY.KH2	ENL.C	B.118	FL.481	A	7	A	D?		
CY.KH2	ENL.C	B.118	FL.463	B	8'	C	D?		
CY.KH2	ENL.C	(B.119)	FL.?	? *					
CY.KH2	ENL.C2	B.122	FL.815	B	9'	A	C		
CY.KH2	ENL.C1	B.122	FL.647	A	10	A	D/B/C		
CY.KH2	ENL.C	(B126)	FL.?	? *					
CY.KH2	ENL.C	(B130)	FL.?	? *					
CY.KH2	ENL.C	(B134)	FL.?	? *					
CY.KH2	ENL.C	(B135)	FL.?	? *					
CY.KH2	ENL.C	B.136	FL.825	? B	11'	C	C		
CY.KH2	ENL.C	B.136	FL.816	B	12'	C	C		
CY.KH2	ENL.C	B.136	FL.803	B	13'	C	C		
CY.KH2	ENL.C	B.136	FL.787	B	14'	C	C		
CY.KH2	ENL.C	B.139	FL.?	? C		D	?		
CY.KH2	ENL.C	B.140	FL.?	? C					
CY.KH2	ENL.B	B.117	FL.462	B	15'	C	D?/E		
CY.KH2	ENL.B	B.118	FL.479	B	16'	C	E		
CY.KH2	ENL.B2	B.119	FL.470	B	17'	C	C		

SITE	PHASE	BUILDING	FLOOR/LAYER	DESCRIPTION	UNIT	DQCFII	END OF OCCUPATION	NATURE OF DEPOSITION	COMMENTS
CY.KH2	ENL.B2	B.119	FL.430	B	18'	C	E		
CY.KH2	ENL.B5	B.120	FL.660	(B139)B	19'	C	D/C		
CY.KH2	ENL.B3	B.121	FL.548	(B120)B	20'	C	C		
CY.KH2	ENL.B	B.121	FL.597	B	21'	C	C		
CY.KH2	ENL.B	B.121	FL.528	B	22'	C	E		
CY.KH2	ENL.B	B.122	FL.552	B	23'	C	D?/E		
CY.KH2	ENL.B	B.122	FL.486	B	24'	C	E		
CY.KH2	ENL.B1	(B123)	FL.?	? *					
CY.KH2	ENL.B3	B.124	FL.616	(B131)B	25'	A	D?		
CY.KH2	ENL.B5	B.125	FL.801	(B140)A	26	A	C		
CY.KH2	ENL.B4	B.125	FL.769	A	27	A	D/C		
CY.KH2	ENL.B3	B.125	FL.531	A	28	A	D/C?		
CY.KH2	ENL.B2	B.125	FL.?	C		C	?		
CY.KH2	ENL.B5	B.126	FL.805	A	29	A	C		
CY.KH2	ENL.B4	B.126	FL.717	A	30	A	C		
CY.KH2	ENL.B3	B.126	FL.635	A	31	A	D/B/C		
CY.KH2	ENL.B2	B.126	FL.541	B	32'	C	C/E		
CY.KH2	ENL.B	B.126	FL.520	B	33'	C	E		
CY.KH2	ENL.B5	B.130	FL.668	B	34'	C	D		
CY.KH2	ENL.B4	B.131	FL.634	? A	35	A	B/D		
CY.KH2	ENL.B3	B.132	FL.642	? * B	36'	D	B/D/C		
CY.KH2	ENL.B5	B.133	FL.696	(B136)B	37'	C	C		
CY.KH2	ENL.B4	B.133	FL.686	B	38'	C	C?		
CY.KH2	ENL.B3	B.133	FL.640	B	39'	C	D/E		
CY.KH2	ENL.B5-3	B.134	FL.?	C					
CY.KH2	ENL.B2	B.134	FL.653	B	40'	B	E		
CY.KH2	ENL.B5-3	B.135	FL.?	C		D	?		
CY.KH2	ENL.B4	B.137	FL.734	?*/ A	41	A	B?/C		
CY.KH2	ENL.B4	B.138	FL.751	?*/ B	42'	C	C?		
CY.KH2	ENL.B4	B.138	FL.741	B	43'	C	E?		
CY.KH2	ENL.B2	B.142	FL.850	(B132)C		C	E		
CY.KH2	ENL.A	B.123	FL.585	B	44'	C	E		
CY.KH2	ENL.A	B.124	FL.521	B	45'	A	E		
CY.KH2	ENL.A	B.125	FL.519	B	46'	B	D?/E		
CY.KH2	ENL.A	B.127	FL.524	(B142)B	47'	C	E		
CY.KH2	ENL.?	B.128	?	?					NOT EXCAV

SITE	PHASE	BUILDING	FLOOR/LAYER	DESCRIPTION	UNIT	DQCFII	END OF OCCUPATION	NATURE OF DEPOSITION	COMMENTS
Khirokitia (Le Brun) - west sector									
CY.KH2	ENL.IV	(B.87)	FL?	[*					
CY.KH2	ENL.IV	(B.90)	FL?	[*					
CY.KH2	ENL.IIIB	B.85	FL.417	? A	1	A	B/C		
CY.KH2	ENL.IIIB	B.85	FL.414	B	2'	C	C		
CY.KH2	ENL.IIIB	B.85	FL.407	B	3'	C	C		
CY.KH2	ENL.IIIA	B.85	FL.346	B	4'	C	C		
CY.KH2	ENL.IIIB	B.87	FL.272	A	5	A	C		
CY.KH2	ENL.IIIA	B.87	FL.221	A	6	A	D/B/C		
CY.KH2	ENL.IIIB	B.90	FL.279	A	7	B	D/C?		
CY.KH2	ENL.IIIA	B.93	FL.295	(B98) B	8'	B	D		
CY.KH2	ENL.IIIB	B.94	FL.397	? A	9	A	C		
CY.KH2	ENL.IIIA	B.94	FL.396	A	10	A	C		
CY.KH2	ENL.IIIA	B.94	FL.288	A	11	A	B?/D?		
CY.KH2	ENL.IIIB	B.97	L.419	? *		A	C		
CY.KH2	ENL.IIIA	B.97	FL.331	B	12'	C	B?/C		
CY.KH2	ENL.IIIB	B.98	FL.296	? B	13'	B	E		
CY.KH2	ENL.IIIB	B.99	FL.345	? A	14	C	C?		
CY.KH2	ENL.IIIA	B.99	FL.306	B	15'	C	D		
CY.KH2	ENL.IIIB	B.101	FL.?	? C		C	E		
CY.KH2	ENL.III	B.102	FL.818	? A	16	D	B?/C		
CY.KH2	ENL.IIIB	B.103	FL.354	? B	17'	C	C		
CY.KH2	ENL.IIIA	B.103	FL.316	B	18'	C	D/E		
CY.KH2	ENL.IIIB	B.104	FL.?	? C		C	E		
CY.KH2	ENL.IIIB	B.105	FL.432	? A	19	C	C		
CY.KH2	ENL.IIIB	B.105	FL.329	B	20'	C	E		
CY.KH2	ENL.IIIA	B.105	FL.349	B	21'	C	E		
CY.KH2	ENL.IIIA	B.107	FL.370	? A	22	C	D/E		
CY.KH2	ENL.IIIA	B.108	FL.376	? A	23	A	D		
CY.KH2	ENL.IIIA	B.109	FL.?	? C					NOT EXCAV
CY.KH2	ENL.IIIA	B.110	FL.?	? C					NOT EXCAV
CY.KH2	ENL.IIIB	B.113	FL.?	? C					NOT EXCAV
CY.KH2	ENL.IIIB	B.114	FL.?	? C					
CY.KH2	ENL.II	(B.82)	L.312	(B93) *					
CY.KH2	ENL.II	(B.83)	FL.?	? *					
CY.KH2	ENL.II	B.84	FL.273	(B90)A	24	A	C		
CY.KH2	ENL.II	B.84	FL.241	A	25	A	B?/C		

SITE	PHASE	BUILDING	FLOOR/LAYER	DESCRIPTION	UNIT	DQCFII	END OF OCCUPATION	NATURE OF DEPOSITION	COMMENTS
CY.KH2	ENL.II	B.85	FL.251	A	26	A	D?/C		
CY.KH2	ENL.II	B.86	FL.218	(B87)B	27'	C	D?/E		
CY.KH2	ENL.II	B.88	FL.237	(B103)A	28	C	C?		
CY.KH2	ENL.II	B.88	FL.231	B	29'	C	D?/E		
CY.KH2	ENL.II	B.89	FL.332	(B108)A	30	A	B		
CY.KH2	ENL.II	B.92	FL.267	? B	31'	A	C?/E		
CY.KH2	ENL.II	B.94	FL.252	A	32	A	D		
CY.KH2	ENL.II	B.97	FL.308	B	33'	C	E		
CY.KH2	ENL.II	B.100	FL.358	? B	34'	B	D		
CY.KH2	ENL.II	B.102	FL.808	A	35	A	C		
CY.KH2	ENL.II	B.102	FL.786	A	36	A	C		
CY.KH2	ENL.II	B.102	FL.757	A	37	A	B?/D		
CY.KH2	ENL.II	(B.112)	L.400	? *		D	?		
CY.KH2	ENL.IC	B.82	FL.219	A	38	A	B/E		
CY.KH2	ENL.IC	B.83	FL.220	A	39	A	D		
CY.KH2	ENL.IB	B.83	FL.?	C		C	E		
CY.KH2	ENL.IC	B.84	FL.224	B	40'	A	E		
CY.KH2	ENL.IC	B.85	FL.216	B	41'	A	E		
CY.KH2	ENL.IC	B.89	FL.319	A	42	A	C		
CY.KH2	ENL.IC	B.89	FL.242	A	43	A	D		
CY.KH2	ENL.IC	B.91	FL.268	(B97)B	44'	C	E		
CY.KH2	ENL.IC	B.94	FL.250-269	B	45'	A	E		
CY.KH2	ENL.IB	B.94	FL.?	*		C	E		
CY.KH2	ENL.IC	B.95	FL.283	(B100)A	46	A	D/C		
CY.KH2	ENL.IA	B.95	FL.?	C		C	E		
CY.KH2	ENL.IC	B.96	FL.392	(B102)A	47	C	D/C		
CY.KH2	ENL.IB	B.96?	FL.366-369	C		C	E?		
CY.KH2	ENL.IC	B.106	FL.377	? B	48'	D	C		
CY.KH2	ENL.IB	B.106	FL.348	B	49'	D	C		
CY.KH2	ENL.IA	B.106	FL.328	B	50'	D	E		
CY.KH2	ENL.IA	B.111	FL.?	C		D	E		
CY.KH2	ENL.IC	B.112	FL.726	B	51'	D	E		
Khirokitia (Dikaios) - both sectors									
CY.KH	ENL.1	BIA (III)	FL.IX-VI	[*		D	F		SECTION ?
CY.KH	ENL.1	BII (IV)	FL.?	[*		D	F		
CY.KH	ENL.1	(BIII)	FL.XV	[*		B	C?		

SITE	PHASE	BUILDING	FLOOR/LAYER	DESCRIPTION	UNIT	DQCFII	END OF OCCUPATION	NATURE OF DEPOSITION	COMMENTS
CY.KH	ENL.1	(BIII)	FL.XIV	*		B	C?		
CY.KH	ENL.1	(BIII)	FL.XIII	A	1	B	C?	A'/B'	
CY.KH	ENL.1	(BIII)	FL.XII	A	2	B	C	C	
CY.KH	ENL.1	(BIII)	FL.XI	A	3	B	C?	C	
CY.KH	ENL.1	BX (V)	FL.XVII	[*		D	F/C?		NO SECTION
CY.KH	ENL.1	BX (V)	FL.XVI	A	4	B	C	C	
CY.KH	ENL.1	BX (V)	FL.XV	A	5	B	F/C?	C?	
CY.KH	ENL.1	BX (V)	FL.XIV	B	6'	D	C?/F		
CY.KH	ENL.1	BX (IV)	FL.XIII	C		C	C		
CY.KH	ENL.1	BX (IV)	FL.XII	A	7	A	F/D?	C	
CY.KH	ENL.1	BX (III)	FL.XI	A	8	B	C	A/B?	
CY.KH	ENL.1	BX (III)	FL.X	B	9'	D	C		
CY.KH	ENL.1	BX (III)	FL.IX	B	10'	D	C		
CY.KH	ENL.1	BXV (IV)	FL.XVI	[*		D	F		
CY.KH	ENL.1	BXV (III)	FL.XV	C		B	C		
CY.KH	ENL.1	BXV (III)	FL.XIV	C		B	F		
CY.KH	ENL.1	BXVII (III)	FL.X-V	[*		B	F		SECTION ?
CY.KH	ENL.1	BXIX (II)	FL.VI	[*		D	C		
CY.KH	ENL.1	BXX (II)	FL.VI-II	[*		A	C?/F		SECTION ?
CY.KH	ENL.1	BXXII (III)	FL.?	[C		D	F		
CY.KH	ENL.1	BXXII (II)	FL.IV	B	11'	B	B		
CY.KH	ENL.1	BXXIII(III)	FL.?	[*		D	F		
CY.KH	ENL.1	BXXIII (II)	FL.?	*		D	F		
CY.KH	ENL.1	BXXIV (III)	FL.?	?*		B	C?		
CY.KH	ENL.1	BXXV (III)	FL.?	[*		B	F		SECTION ?
CY.KH	ENL.1	BXXV (II)	FL.?	*		B	F		SECTION ?
CY.KH	ENL.1	(BXXVII)	FL.?	[*		D	F/C?		SEC/PL ?
CY.KH	ENL.1	BXXXIV (II)	FL.I	?C		D	B/C		NO SEC/PL
CY.KH	ENL.1	BXL (V-IV)	FL.?	?*		D	F		NO SECTION
CY.KH	ENL.1	BXL (III)	FL.?	*		D	F		
CY.KH	ENL.1	BXLV(III-II)	FL.?	?*		D	F		
CY.KH	ENL.1	BXLVII (II)	FL.?	[*		C	C?		
CY.KH	ENL.1								
CY.KH	ENL.2	BIA (II)	FL.V	B	12'	C	C		SECTION ?
CY.KH	ENL.2	BIA (II)	FL.IV	B	13'	C	C		
CY.KH	ENL.2	BIA (II)	FL.III	B	14'	C	C		
CY.KH	ENL.2	BIA (II)	FL.II	B	15'	C	C		

SITE	PHASE	BUILDING	FLOOR/LAYER	DESCRIPTION	UNIT	DQCFII	END OF OCCUPATION	NATURE OF DEPOSITION	COMMENTS
CY.KH	ENL.2	BIA (II)	FL.I	A	16	A	B/D/C	C	
CY.KH	ENL.2?	(BXVI)	FL.?	? C		D	F		SECTION ?
CY.KH	ENL.2	BXVI (II)	FL.II	A	17	B	F/C?		SECTION ?
CY.KH	ENL.2	BXVI (II)	FL.I	B	18'	A	F/E		
CY.KH	ENL.2?	(BXI)	FL.?	? *		D	F		
CY.KH	ENL.2	BXI (II)	FL.II	B	19	C	C?		
CY.KH	ENL.2	BXI (II)	FL.I	A	20	C	D?/C?	C	
CY.KH	ENL.2?	(BXIIA)	FL.?	? *		D	F		
CY.KH	ENL.2	BXIIA (II)	FL.III	B	21'	C	C		
CY.KH	ENL.2	BXIIA (II)	FL.II	A	22	A	C	C?	
CY.KH	ENL.2	BXIIA (II)	FL.I	C		C	F/E		NO PLAN
CY.KH	ENL.2	BI (II)	FL.I	? B	23'	A	F		NO SECTION
CY.KH	ENL.2	BII (III)	FL.VI-IV	C		B	C		
CY.KH	ENL.2	BII (II)	FL.III-II	C		B	C		
CY.KH	ENL.2	BIII (I)	FL.X	A	24	A	A?/C	C	NO PLAN
CY.KH	ENL.2	BIII (I)	FL.IX	A	25	A	C	C	
CY.KH	ENL.2	BIII (I)	FL.VIII-VII	B	26'	C	C		
CY.KH	ENL.2	BIII (I)	FL.VIe	A	27	A	C	C	
CY.KH	ENL.2	BIII (I)	FL.VId	A	28	A	C	C	
CY.KH	ENL.2	BIII (I)	FL.VIc-b	B	29'	A	C	C	
CY.KH	ENL.2	BIII (I)	FL. VIa	A	30	A	B/C?	C	
CY.KH	ENL.2	BIII (I)	FL. V	B	31'	A	B?/C?		NO PLAN
CY.KH	ENL.2	BIII (I)	FL.IV	B	32'	C	B/C		
CY.KH	ENL.2	BIII (I)	FL.III	B	33'	C	C		NO PLAN
CY.KH	ENL.2	BIII (I)	FL.II	B	34'	C	C		
CY.KH	ENL.2	BV	FL.IX	[A	35	A	C?	C	
CY.KH	ENL.2	BV	FL.VIII	A	36	A	B/C	C	
CY.KH	ENL.2	BV	FL.VII	B	37'	C	C	C	
CY.KH	ENL.2	BV	FL.VI	B	38'	C	C	C	NO PLAN
CY.KH	ENL.2	BV	FL.V	B	39'	C	C		
CY.KH	ENL.2	BV	FL.IV	A	40	A	C	C	
CY.KH	ENL.2	BV	FL.III	A	41	A	F/C?	C	
CY.KH	ENL.2	BV	FL.II	B	42'	C	C?/E		
CY.KH	ENL.2	BVIII (II)	FL.IV	? B	43'	A	C		
CY.KH	ENL.2	BVIII (II)	FL.III	A	44	A	B/C	C	
CY.KH	ENL.2	BX (II)	FL.VIII	C		D	C		NO PLAN/SE
CY.KH	ENL.2	BX (II)	FL.VII	B	45'	C	C?/F		SECTION ?

SITE	PHASE	BUILDING	FLOOR/LAYER	DESCRIPTION	UNIT	DQCFII	END OF OCCUPATION	NATURE OF DEPOSITION	COMMENTS
CY.KH	ENL.2	BX (II)	FL.VI	B	46'	C	B/C?		
CY.KH	ENL.2	BX (II)	FL.V	A	47	A	C	C	SECTION ?
CY.KH	ENL.2	BX (II)	FL.IV	B	48'	D	C		NO SECTION
CY.KH	ENL.2	BX (II)	FL.III	C		B	D/B/C		NO PL/SECT
CY.KH	ENL.2	BXV (II)	FL.XIII	B	49'	C	C		
CY.KH	ENL.2	BXV (II)	FL. XII	A	50	A	C	C	
CY.KH	ENL.2	BXV (II)	FL. XI	A	51	A	B	C	
CY.KH	ENL.2	BXV (II)	FL.X	B	52'	C	C		
CY.KH	ENL.2	BXV (II)	FL.IX	B	53'	C	C		
CY.KH	ENL.2	BXV (II)	FL.VIII	A	54	A	C		
CY.KH	ENL.2	BXV (II)	FL.VII	B	55'	C	C		NO SECTION
CY.KH	ENL.2	BXV (II)	FL.VI	B	56'	C	C		
CY.KH	ENL.2	BXV (II)	FL.V	B	57'	C	B?/C		
CY.KH	ENL.2	BXV (II)	FL.IV	B	58'	C	C		SECTION ?
CY.KH	ENL.2	BXV (II)	FL.III	B	59'	C	C		NO SECTION
CY.KH	ENL.2	BXV (II)	FL.II	B	60'	C	C		
CY.KH	ENL.2	BXV-A	FL. II	? B	61'	A	C		NO SECTION
CY.KH	ENL.2	BXV-A	FL.I	B	62'	A	D/C		
CY.KH	ENL.2	BXVII (II)	FL.IV	B	63'	C	C		
CY.KH	ENL.2	BXVII (II)	FL.III	B	64'	C	B/C?		SECTION ?
CY.KH	ENL.2	BXIX (II-I)	FL.V	C		A	C		
CY.KH	ENL.2	BXIX (II-I)	FL.IV	B	65'	C	C		
CY.KH	ENL.2	BXIX (II-I)	FL.III	B	66'	C	C		NO PLAN
CY.KH	ENL.2	BXIX (II-I)	FL.II	B	67'	C	C		SEC/PL ?
CY.KH	ENL.2	BXIX (II-I)	FL.I	B	68'	C	E		SEC/PL ?
CY.KH	ENL.2	BXX (I)	FL.I	A	69	A	B/D?	C	
CY.KH	ENL.2	BXXII (I)	FL.III	A	70	A	B	A/B	
CY.KH	ENL.2	BXXII (I)	FL.II	A	71	A	C	C	SECTION ?
CY.KH	ENL.2	BXXII (I)	FL.I	B	72'	A	F/E		
CY.KH	ENL.2	BXXIII (I)	FL.I	B	73'	A	F		SECTION ?
CY.KH	ENL.2	BXXIV (I)	FL.III	A	74	A	C	C	SECTION ?
CY.KH	ENL.2	BXXIV (I)	FL.II	A	75	A	C	C	
CY.KH	ENL.2	BXXIV (I)	FL.I	B	76'	A	D?/E		
CY.KH	ENL.2	BXXV (I)	FL.VI-V	C		A	A?		NO SEC/PL
CY.KH	ENL.2	BXXV (I)	FL.IV	B	77'	C	F		SECTION ?
CY.KH	ENL.2	BXXV (I)	FL.III	B	78'	C	F		SECTION ?
CY.KH	ENL.2	BXXV (I)	FL.II	B	79'	A	F		SECTION ?

SITE	PHASE	BUILDING	FLOOR/LAYER	DESCRIPTION	UNIT	DQCFII	END OF OCCUPATION	NATURE OF DEPOSITION	COMMENTS
CY.KH	ENL.2	BXXV (I)	FL.I	C		C	F/E		
CY.KH	ENL.2	BXXVI (II)	FL.I	? A	80	A	A/D/C	C	NO SECTION
CY.KH	ENL.2	BXXVII (I)	FL.III	B	81'	A	B/C		NO PLAN
CY.KH	ENL.2	BXXVII (I)	FL.II	A	82	A	C	C	
CY.KH	ENL.2	BXXVII (I)	FL.I	A	83	A	B/D	C	SECTION ?
CY.KH	ENL.2	BXXVIII(II)	FL.I	? B	84'	A	F		NO SECTION
CY.KH	ENL.2	BXXIX (II)	FL.I	? A	85	A	F		NO SECTION
CY.KH	ENL.2	BXXX (II)	FL.I	? C		C	F		NO SEC/PL
CY.KH	ENL.2	BXXXI (II)	FL.I	? C		C	C		
CY.KH	ENL.2	BXL (II)	FL.I	B	86'	A	B/D		NO SEC/PL
CY.KH	ENL.2	BXLIII (II)	FL.II	B	87'	A	F		NO SECTION
CY.KH	ENL.2	BXLV (I)	FL.III	B	88'	A	C		
CY.KH	ENL.2	BXLV (I)	FL.II	B	89'	A	C		
CY.KH	ENL.2	BXLV (I)	FL.I	B	90'	C	E		
CY.KH	ENL.2	BXLVII (I)	FL.VIII	B	91'	A	C		
CY.KH	ENL.2	BXLVII (I)	FL.VII	B	92'	A	B/C		
CY.KH	ENL.2	BXLVII (I)	FL.VI	B	93'	A	C		
CY.KH	ENL.2	BXLVII (I)	FL.V	B	94'	A	B/C?		
CY.KH	ENL.2	BXLVII (I)	FL.IV	B	95'	A	C		
CY.KH	ENL.2	BXLVII (I)	FL.III	A	96	A	C	C	
CY.KH	ENL.2	BXLVII (I)	FL.II	B	97'	A	C		NO PLAN
CY.KH	ENL.2	BXLVII (I)	FL.I	B	98'	A	B/C?		NO PLAN
CY.KH	ENL.2								
CY.KH	ENL.3	BIA (I)	FL.?	*		C	E		
CY.KH	ENL.3?	BXI (I?)	FL?	C		C	E		
CY.KH	ENL.3	BII (I)	FL.I	C		B	E		
CY.KH	ENL.3	BIII (I)	FL.Ia-b	B	99'	C	D/E		
CY.KH	ENL.3	BIV (I)	FL.I	B	100'	A	D?/E	C?	
CY.KH	ENL.3?	BV	FL.I	C		C	D?/E		
CY.KH	ENL.3	BVII (I)	FL.III	? A	101	A	C	C	SECTION ?
CY.KH	ENL.3	BVII (I)	FL.II	A	102	A	C	A/B'	
CY.KH	ENL.3	BVII (I)	FL.I	B	103'	C	C?/E		
CY.KH	ENL.3	BVIII (I)	FL.II	B	104'	C	C		NO PLAN/SE
CY.KH	ENL.3	BVIII (I)	FL.I	C		C	E		
CY.KH	ENL.3	BX (I)	FL.II	A	105	A	C	C	PL/SECT ?
CY.KH	ENL.3	BX (I)	FL.I	C		C	D?/E		
CY.KH	ENL.3	BXV (II)	FL.I	C		C	E		NO SECTION

SITE	PHASE	BUILDING	FLOOR/LAYER	DESCRIPTION	UNIT	DQCFII	END OF OCCUPATION	NATURE OF DEPOSITION	COMMENTS
CY.KH	ENL.3	BXVII (I)	FL.II-I	*		C	E		
CY.KH	ENL.3	BXVIII (I)	FL.II	? B	106'	A	C		NO SECTION
CY.KH	ENL.3	BXVIII (I)	FL.I	B	107'	A	D?/E		NO SECTION
CY.KH	ENL.3	BXXXV (I)	FL.I	C		D	F		
CY.KH	ENL.3	BXXXVI (I)	FL.IV	? B	108'	A	C		NO SECTION
CY.KH	ENL.3	BXXXVI (I)	FL.III	B	109'	A	F		NO PLAN
CY.KH	ENL.3	BXXXVI (I)	FL.II	B	110'	A	F		NO SECTION
CY.KH	ENL.3	BXXXVI (I)	FL.I	C		A	F		NO SECTION
CY.KH	ENL.3	BXXXVII (I)	FL.II	? B	111'	A	F		NO SECTION
CY.KH	ENL.3	BXXXVII (I)	FL.I	*		C	F		NO SECTION
CY.KH	ENL.3	BXL (I)	FL.?	*		C	F/E		NO SEC/PL
CY.KH	ENL.3	BXLII (I)	FL.I	? B	112'	A	F		NO SECTION
CY.KH	ENL.3	BXLIII (I)	FL.I	C		C	F/E		NO SECTION
Sotira (Dikaios)									
CY.ST	LNL.1	B36	FL.IV	[A	1	A	C?	C	
CY.ST	LNL.1	B36	FL.III	A	2	A	A?	C	
CY.ST	LNL.1	B37	FL.III?	[B	3'	C	A?/E		
CY.ST	LNL.1	B29	FL.III	[A	4	D	B	C	
CY.ST	LNL.1	B29	FL.II	C		C	C/F		
CY.ST	LNL.1	B29	FL.I?	C		C	F		NO SECTION
CY.ST	LNL.1	B38	FL.IV	[A	5	D	B/C	A/B?	
CY.ST	LNL.1	B38	FL.III	A	6	D	B?/F	A'/B?	
CY.ST	LNL.1	B39	FL.IV	[B	7'	D	C		
CY.ST	LNL.1	B39	FL.III	A	8	D	A/B	A/B?	
CY.ST	LNL.1	B40	FL.III	[A	9	D	B/D/C	C	
CY.ST	LNL.2	B1	FL.III	[* A	10	A	C?	A/B'	
CY.ST	LNL.2	B1	FL.II	B	11'	A	B/C	A'/B'	
CY.ST	LNL.2	B1-PORC	FL.II	B	12'	C	F		SECTION ?
CY.ST	LNL.2	B1A	FL.II	? C		D	C?		
CY.ST	LNL.2	B1A	FL.I	B	13'	A	E		
CY.ST	LNL.2?	(B6)	FL.III	? C		B	D?/C		
CY.ST	LNL.2	B6	FL.II	A	14	A	D?/C	A'/B'	
CY.ST	LNL.2	B3	FL.III	[A	15	A	C?	A/B	
CY.ST	LNL.2	B3	FL.II	A	16	A	C?	A'/B	
CY.ST	LNL.2	B5	FL.III	[A	17	A	C?	A'/B	
CY.ST	LNL.2	B5	FL.II	A	18	A	B/C	A'/B	

SITE	PHASE	BUILDING	FLOOR/LAYER	DESCRIPTION	UNIT	DQCFII	END OF OCCUPATION	NATURE OF DEPOSITION	COMMENTS
CY.ST	LNL.2	B7	FL.III	[A	19	A	C	A/B	
CY.ST	LNL.2	B7	FL.II	A	20	A	B/C	A/B	
CY.ST	LNL.2	B9	FL.II	[B	21'	C	C?		
CY.ST	LNL.2	B9	FL.I	B	22'	C	D/E		
CY.ST	LNL.2	B13A	FL.III	[* C		D	B/C		NO PLAN
CY.ST	LNL.2?	(B17)	FL.III	[A	23	A	C?/F	C	
CY.ST	LNL.3	B2	FL.II	[A	24	A	B/C	A'/B	
CY.ST	LNL.3	B4	FL.II	[B	25'	C	F		
CY.ST	LNL.3?	B4	FL.I	? C		C	F/E		
CY.ST	LNL.3?	(B34)	FL.III	[*		D	C?		
CY.ST	LNL.3	B34	FL.II	C		C	C?/E		
CY.ST	LNL.3	B34	FL.I	C		C	E		
CY.ST	LNL.3	B8	FL.II	[A	26	C	B/C	A'/B'	
CY.ST	LNL.3?	(B8A)	FL.III	[*		D	C		
CY.ST	LNL.3	B8A	FL.II	B	27'	A	C?/F		
CY.ST	LNL.3?	B8A	FL.I	C		A	D?/E		
CY.ST	LNL.3	B10	FL.II	[A	28	C	C	C?	
CY.ST	LNL.3	B11	FL.II	[A	29	A	B/C?	A'/B	
CY.ST	LNL.3	B12	FL.II	[A	30	A	B/C?	A/B	
CY.ST	LNL.3	B16	FL.II	? * A	31	A	B/C?	C?	
CY.ST	LNL.3	B13	FL.II	A	32	C	B/C	A/B	
CY.ST	LNL.3	B14	FL.II	(B37) A	33	A	B/C	A/B	
CY.ST	LNL.3	B15	FL.II	(?) B	34'	C	B?		NO SECTION
CY.ST	LNL.3?	B15	FL.I	C		C	D?/E		
CY.ST	LNL.3	B17	FL.II	A	35	A	B/C	C	
CY.ST	LNL.3	B18	FL.II	[A	36	D	B/C	A'/B'	
CY.ST	LNL.3	B19	FL.II	[A	37	D	C?/F	C	
CY.ST	LNL.3	B19	FL.I	B	38'	D	F/E		
CY.ST	LNL.3?	(B20)	FL.III	[*		D	C?		
CY.ST	LNL.3	B20	FL.II	A	39	D	B/C	A/B?	
CY.ST	LNL.3	B21	FL.II	[A	40	C	B/C	C	
CY.ST	LNL.3	B22	FL.II	[B	41'	C	B?/C		
CY.ST	LNL.3	B23	FL.I	[* C		C	F/E		
CY.ST	LNL.3	B35	FL.II	? C		D	F		NO SECTION
CY.ST	LNL.3	B35	FL.I	C		D	F		
CY.ST	LNL.3	B24	FL.II	[A	42	A	B/C	A'/B?	
CY.ST	LNL.3?	(B25)	FL.III	[*		D	C?		

SITE	PHASE	BUILDING	FLOOR/LAYER	DESCRIPTION	UNIT	DQCFII	END OF OCCUPATION	NATURE OF DEPOSITION	COMMENTS
CY.ST	LNL.3	B25	FL.II	A	43	D	C	C	
CY.ST	LNL.3	B26	FL. ?	? C		D	F		
CY.ST	LNL.3	B27	FL.II	(B40) A	44	D	B?/F	A/B?	
CY.ST	LNL.3?	B27	FL.I	C		D	D/C		NO PLAN
CY.ST	LNL.3?	B28	FL.I	(B40) C		D	D/C		
CY.ST	LNL.3	B30	FL.II	[A	45	A	C	C	
CY.ST	LNL.3	B31	FL.II	[A	46	A	C	C	
CY.ST	LNL.3?	B31	FL.I	C		C	D?/E		NO PLAN
CY.ST	LNL.3	B31A	FL.II	(B36) A	47	A	F/C?	C	NO SECTION
CY.ST	LNL.3	B31A	FL.I	A	48	A	F/E	C	NO SECTION
CY.ST	LNL.3	B32	FL.II	[A	49	C	B?/C	C	
CY.ST	LNL.3?	B32	FL.I	C		C	E		
CY.ST	LNL.3?	(B33)	FL.III	? *		D	C?		
CY.ST	LNL.3	B33	FL.II	B	50'	A	C	C	
CY.ST	LNL.3?	B33	FL.I	C		C	E		
CY.ST	LNL.3?	(B34A)	FL.III	[*		D	F		
CY.ST	LNL.3	B34A	FL.II	C		C	F		
CY.ST	LNL.3	B34A	FL.I	C		C	F/E		
CY.ST	LNL.4	B1	FL.I	B	51'	A	B/D/E		
CY.ST	LNL.4	B6	FL.I	A	52	A	F/E	C	
CY.ST	LNL.4	B3	FL.I	B	53'	C	E		
CY.ST	LNL.4	B5	FL.I	B	54'	A	D/E		
CY.ST	LNL.4	B7	FL.I	C		A	D?/E		
CY.ST	LNL.4	B2	FL.I	B	55'	A	E		
CY.ST	LNL.4	B8	FL.I	A	56	C	D?/E	C	
CY.ST	LNL.4	B10	FL.I	B	57'	C	E		
CY.ST	LNL.4	B11	FL.I	B	58'	A	D?/E		
CY.ST	LNL.4	B12	FL.I	B	59'	A	D?/E		
CY.ST	LNL.4	B16	FL.I	B	60'	A	D?/E		
CY.ST	LNL.4	B13	FL.I	B	61'	C	F/E		
CY.ST	LNL.4	B14	FL.I	A	62	A	D?/E	A/B	
CY.ST	LNL.4	B17	FL.I	B	63'	C	F/E		
CY.ST	LNL.4	B18	FL.I	C		C	E		
CY.ST	LNL.4	B20	FL.I	B	64'	D	F/E		
CY.ST	LNL.4	B21	FL.I	B	65'	C	F/E		
CY.ST	LNL.4	B22	FL.I	C		C	E		
CY.ST	LNL.4	B24	FL.I	C		A	E		NO PLAN

SITE	PHASE	BUILDING	FLOOR/LAYER	DESCRIPTION	UNIT	DQCFII	END OF OCCUPATION	NATURE OF DEPOSITION	COMMENTS
CY.ST	LNL.4	B25	FL.I	A	66	D	D?/E	A'/B'	
CY.ST	LNL.4	B30	FL.I	A	67	A	D?/E	C	
Ayios Epiktitos- Vrysi (Peltenburg)									
CY.AV	LNL.1	B1	L.13-17	[*		B	C		
CY.AV	LNL.1	B1	FL.5	A	1	B	B/D	A'/B'	
CY.AV	LNL.1	B1	FL.4B	A	2	B	C	A'/B'	
CY.AV	LNL.1	B1	FL.4A	A	3	B	C/D?	A'/B	
CY.AV	LNL.1	B6	L.3	?*		D	B		
CY.AV	LNL.1	B7	L.5	?*		D	B		NO PLAN
CY.AV	LNL.1	B7	FL.2	A	4	D	B	A'/B	
CY.AV	LNL.1	B7	FL.1	*		D	D/C		
CY.AV	LNL.1	B7	L.3	C		C	C/E		
CY.AV	LNL.1?	B12	FL.2	?*		D	B/D?		
CY.AV	LNL.1	B4A	L.5	[*/C		D	E		
CY.AV	LNL.1	B4B	L.8	[*/C		D	?		
CY.AV	LNL.1	B9	L.3	[*/C		C	E		
CY.AV	LNL.2	B1	FL.3	A	5	A	C	A'/B'	
CY.AV	LNL.2	B1	FL.2	B	6'	A	C		
CY.AV	LNL.2	B1	FL.1?	*		A	B/D/E		
CY.AV	LNL.2	B5	FL.2	?*/A	7	A	C	A'/B	
CY.AV	LNL.2	B5	FL.1	A	8	A	D/C	A'/B'	
CY.AV	LNL.2	B6	FL.3	B	9'	C	C		
CY.AV	LNL.2	B6	FL.2	A	10	C	B	A'/B	
CY.AV	LNL.2	B6	FL.1	*		C	D		
CY.AV	LNL.2	B7	L.2-1	C		D	E		
CY.AV	LNL.2?	B12	FL.1	B	11'	C	B/D/E		
CY.AV	LNL.2	B2A	FL.4B	[*/A	12	B	C	C	
CY.AV	LNL.2	B2A	FL.4A	A	13	A	C	C	
CY.AV	LNL.2	B2A	FL.3	A	14	A	?/C?	A/B	
CY.AV	LNL.2	B2A	FL.2	A	15	C	D?/B	C?	
CY.AV	LNL.2	B2B	FL.5	?*/A	16	A	C	A'/B'	
CY.AV	LNL.2	B2B	FL.4A-B	B	17'	A	C		
CY.AV	LNL.2	B2B	FL.3	A	18	A	B	A'/B'	
CY.AV	LNL.2	B2B	FL.2	A	19	C	?	A'/B'	
CY.AV	LNL.2	B3	FL.5	[?/B	20'	A	C		
CY.AV	LNL.2	B3	FL.4	A	21	A	C	A'/B	

SITE	PHASE	BUILDING	FLOOR/LAYER	DESCRIPTION	UNIT	DQCFII	END OF OCCUPATION	NATURE OF DEPOSITION	COMMENTS
Khirokitia (Le Brun) - west sector									
CY.KH2	ENL.IV	(B.87)	FL?	[*					
CY.KH2	ENL.IV	(B.90)	FL?	[*					
CY.KH2	ENL.IIIB	B.85	FL.417	? A	1	A	B/C		
CY.KH2	ENL.IIIB	B.85	FL.414	B	2'	C	C		
CY.KH2	ENL.IIIB	B.85	FL.407	B	3'	C	C		
CY.KH2	ENL.IIIA	B.85	FL.346	B	4'	C	C		
CY.KH2	ENL.IIIB	B.87	FL.272	A	5	A	C		
CY.KH2	ENL.IIIA	B.87	FL.221	A	6	A	D/B/C		
CY.KH2	ENL.IIIB	B.90	FL.279	A	7	B	D/C?		
CY.KH2	ENL.IIIA	B.93	FL.295	(B98) B	8'	B	D		
CY.KH2	ENL.IIIB	B.94	FL.397	? A	9	A	C		
CY.KH2	ENL.IIIA	B.94	FL.396	A	10	A	C		
CY.KH2	ENL.IIIA	B.94	FL.288	A	11	A	B?/D?		
CY.KH2	ENL.IIIB	B.97	L.419	? *		A	C		
CY.KH2	ENL.IIIA	B.97	FL.331	B	12'	C	B?/C		
CY.KH2	ENL.IIIB	B.98	FL.296	? B	13'	B	E		
CY.KH2	ENL.IIIB	B.99	FL.345	? A	14	C	C?		
CY.KH2	ENL.IIIA	B.99	FL.306	B	15'	C	D		
CY.KH2	ENL.IIIB	B.101	FL.?	? C		C	E		
CY.KH2	ENL.III	B.102	FL.818	? A	16	D	B?/C		
CY.KH2	ENL.IIIB	B.103	FL.354	? B	17'	C	C		
CY.KH2	ENL.IIIA	B.103	FL.316	B	18'	C	D/E		
CY.KH2	ENL.IIIB	B.104	FL.?	? C		C	E		
CY.KH2	ENL.IIIB	B.105	FL.432	? A	19	C	C		
CY.KH2	ENL.IIIB	B.105	FL.329	B	20'	C	E		
CY.KH2	ENL.IIIA	B.105	FL.349	B	21'	C	E		
CY.KH2	ENL.IIIA	B.107	FL.370	? A	22	C	D/E		
CY.KH2	ENL.IIIA	B.108	FL.376	? A	23	A	D		
CY.KH2	ENL.IIIA	B.109	FL.?	? C					NOT EXCAV
CY.KH2	ENL.IIIA	B.110	FL.?	? C					NOT EXCAV
CY.KH2	ENL.IIIB	B.113	FL.?	? C					NOT EXCAV
CY.KH2	ENL.IIIB	B.114	FL.?	? C					
CY.KH2	ENL.II	(B.82)	L.312	(B93) *					
CY.KH2	ENL.II	(B.83)	FL.?	? *					
CY.KH2	ENL.II	B.84	FL.273	(B90)A	24	A	C		
CY.KH2	ENL.II	B.84	FL.241	A	25	A	B?/C		

SITE	PHASE	BUILDING	FLOOR/LAYER	DESCRIPTION	UNIT	DQCFII	END OF OCCUPATION	NATURE OF DEPOSITION	COMMENTS
CY.AV	LNL.2	B3	FL.3	A	22	A	D?	A'/B'	
CY.AV	LNL.2	B3	FL.2	B	23'	A	C?		
CY.AV	LNL.2	B3	FL.1	B	24'	A	D/E		
CY.AV	LNL.2?	B3	FL.?	C		C	E		
CY.AV	LNL.2	B4A	FL.3?	*		D	C		
CY.AV	LNL.2	B4A	FL.2	B	25'	C	D/E/C		
CY.AV	LNL.2	B4B	FL.2	A	26	A	D	A'/B'	
CY.AV	LNL.2	B4B	YARD	B	27'	A	C		
CY.AV	LNL.2?	B9	FL.2	C		C	D		
CY.AV	LNL.2	B9	FL.1	C		C	D/E		
CY.AV	LNL.3?	B5	FL.?	*		C	D?/E		
CY.AV	LNL.3	B6	FL.?	C		C	E		
CY.AV	LNL.3	B2A	FL.1	C		C	E		
CY.AV	LNL.3	B2B	FL.1	B	28'	C	C?/E		
CY.AV	LNL.3	B4A	FL.1B	A	29	D	C/E	C?	
CY.AV	LNL.3	B4A	FL.1A	*		C	E		
CY.AV	LNL.3?	B4A	FL.?	*		C	E		
CY.AV	LNL.3	B4B	FL.1/YARD	A	30	A	?	A'/B'	

Table 2: Features associated with floors.

UNIT	"HEARTHS"				"PLATFORMS"				"FIXED CONTAINERS"		
	hearth	fireplace	firepit	oven	platforms	benches	pavings	slabs	basins	bins	other
Khirokitia (Le Brun) - east sector											
1'		1?			1				1		
2'											
3'					1						
4'		1			1		1				
5	1						1		1		
6	1				1						
7		1									
8'											1 depres.+ 1 stone set
9'		1			1						
10	1				1						
11'	1										
12'	1										
13'		1					1				
14'	1										
15'							1?				
16'											
17'											
18'							1				
19'	1?										
20'			1						1		
21'			1						2		1 stone setting
22'									1		
23'	1				1						1 stone setting
24'									1		
25'									1		
26	1				1						
27	1				2						
28	1				1						
29	1										
30	1					1					
31		1				1					

UNIT	"HEARTHS"				"PLATFORMS"				"FIXED CONTAINERS"		
	hearth	fireplace	firepit	oven	platforms	benches	pavings	slabs	basins	bins	other
32'											
33'						1					
34'											
35	1										
36'	1										
37'		1									
38'		1									1 depression
39'		1									
40'											
41	1										
42'											
43'											
44'											
45'											
46'							1				
47'											
Khirokitia (Le Brun) - west sector											
1	1				1						
2'		1							1		
3'		1				1					
4'	1										
5					1				1		
6		1							1		
7											
8'											
9	1				1	1					
10	1				2	1					
11	1				1	2					
12'	1					1					
13'	1										
14											
15'											
16	1										
17'			1								
18'			1								

UNIT	"HEARTHS"				"PLATFORMS"				"FIXED CONTAINERS"		
	hearth	fireplace	firepit	oven	platforms	benches	pavings	slabs	basins	bins	other
19	1										
20'	1				1				1		
21'					1				1		
22					1						
23	1				1	1					
24	1				1	1					
25	1								1		
26	1				1						
27'									1		
28	1				1		1				
29'			1		1				1		
30						1					
31'	1										
32						1					
33'	1				1						
34'											
35					1						
36		1									
37	1				1						
38	1				1						
39											
40'						1					
41'			1								
42	1					1					
43	1				1						
44'											
45'	1				1						
46						1					
47					1						
48'					1	1					
49'									1		
50'											
51'											
Khirokitia (Dikaios) both sectors											
1		1									1 row of boulders

UNIT	"HEARTHS"				"PLATFORMS"				"FIXED CONTAINERS"		
	hearth	fireplace	firepit	oven	platforms	benches	pavings	slabs	basins	bins	other
2											2 depressions
3		1					1				
4							2				
5											
6'	2						1				
7	2	1									
8	1										
9'	1				1			2			
10'	1							1			
11'	1				1						
12'	1				1						
13'					1			1			
14'					1						
15'	1	1									
16	1	1									
17											
18'											
19	1										
20					1		1				
21'					1						2 rows of stones
22							1				
23'		1?					1				
24											
25											
26'	1?										
27	1						1				
28	1				4			2			
29'	1										
30	1										1 row of stones
31'											
32'											
33											
34'							1				
35	1										
36	1										
37'							1				

UNIT	"HEARTHS"				"PLATFORMS"				"FIXED CONTAINERS"		
	hearth	fireplace	firepit	oven	platforms	benches	pavings	slabs	basins	bins	other
38'											
39'							1				
40					1						
41	1						1				
42'											
43'		1					1				
44											
45'	1				1						
46'		1?			1						
47											
48'	1										
49'											
50	1	1?						2			
51											
52'											
53'								1			
54											
55'											
56'							1	1			
57'											
58'											
59'	1				1				1		1 depression
60'											
61'											
62'	1				1						
63'					2						
64'					1						
65'							1				
66'							2				
67'	1										
68'											
69					1		2				
70	1										
71											
72'							1				1 depression
73'	1				1						

UNIT	"HEARTHS"				"PLATFORMS"				"FIXED CONTAINERS"		
	hearth	fireplace	firepit	oven	platforms	benches	pavings	slabs	basins	bins	other
74	1										
75	1										
76'											row of stones?
77'											
78'											
79'											
80							1				
81'											
82											
83							1				
84'	1										
85					1		1				
86'											
87'	1						2				
88'	2										
89'											
90'					1						
91'											
92'							1	2?			
93'											
94'	1						2	2?			
95'											
96	1							1			
97'											
98'	1										
99'											
100'	1										
101		1									
102	1						1				
103'	1										
104'											
105											
106'											
107'							1				
108'	1							1			1 row of stones
109'											

UNIT	"HEARTHS"				"PLATFORMS"				"FIXED CONTAINERS"		
	hearth	fireplace	firepit	oven	platforms	benches	pavings	slabs	basins	bins	other
110'	1										
111'							1				
112'	1										
Sotira (Dikaios)											
1	1				1						
2		1									
3'											
4	1										
5	2				1			2			
6	1							2			
7'	1										
8											
9											
10	1							4			
11'	1				1			1		1	
12'											
13'											
14											
15	1										
16	2							2			
17	1				1					1	stone setting?
18	3					1		3		1	
19	1	1						2		1	
20	1					1		1		1	
21'						1?		4			
22'	2									1	
23		1						1			
24	1				1			2		1	
25'	1					1		1			
26	1									1	
27'		1									
28	1					1?		2		2	
29	1							2			
30		1						3?		1?	
31	1										

UNIT	"HEARTHS"				"PLATFORMS"				"FIXED CONTAINERS"		
	hearth	fireplace	firepit	oven	platforms	benches	pavings	slabs	basins	bins	other
32	1	1			2					1	
33	2				1						
34'	1										
35											
36						1?		4			
37	1										
38'		1									
39	1							2		1	
40	2							4			2 slabs/fire cover
41'	1				1	1		1		2	
42					2	1		1		1	
43								1			
44	1										
45	1							1			
46											
47										1	
48		1									
49		1						1			
50'	1							2			
51'								3			
52		1									
53'	1							2?			
54'											
55'		1			1						
56	1									1	
57'											
58'											
59'		1									
60'											
61'					1					1	
62	1					2				1	
63'	1										
64'	1										
65'										1	
66											1 slab with hollow
67	1	1									

UNIT	"HEARTHS"				"PLATFORMS"				"FIXED CONTAINERS"		
	hearth	fireplace	firepit	oven	platforms	benches	pavings	slabs	basins	bins	other
Ayios Epiktitos Vrysi (Peltenburg)											
1	1							3			
2	1					1	leaf-carpeted floor				
3	1					1					
4	1								1	1	2 stone settings
5	1					3?					
6'	1	2							1		
7	1						pebbled area	1			
8	1					1					
9'	1	1									
10	1					1					1 stone setting
11'	1					1					
12	1					1					
13	1					1					
14	2	1			2		pebbled area			2	
15	2						pebbled area			1	
16	1					1				1	1 stone setting
17'	1					1				2	
18	2										
19	2									1	
20'	1										
21		2		1		1		3		1	
22						2?					
23'							pebbled area				
24'	1					2	pebbled area				
25'	1						2 pebbled areas				
26	1										
27'											
28'							pebbled area		1		
29	1					1					
30					2		cobbled area				

Table 3: Material found inside enclosed areas in structures from Sotira and Vrysi.

UNIT	TYPE OF ACTIVITY	LIST
Sotira (Dikaios)		
1	?	?
2	?	?
5	?	?
9	?	?
17	storing?	several frag.vases,idol
18	storing?	frag. vases
24	grinding?	quern, trough
26	?	? stones
29	?	few stones
30	grinding?	2querns,2pits,3slabs,unfinis.celts
32	?	?
36	?	?
27	?	1 grave (adult / man)
35	?	1 hearth
80	?	paved area, rectang.slabs (seats?)
Ayios Epiktitos Vrysi (Peltenburg)		
14	?	? filled with small stones
16	?	? few crumbly CW sherds

Table 4: Implements.

Note: (small find numbers and corss-references, refer to the publication of each particular site).

UNIT	SFNUM	TYPE	MATERIAL	CROSS-REF.
Khirokitia (Dikaios)				
1	1497	POUNDER	ANDESITE	FIG. 24
2	1484	POUNDER	ANDESITE	FIG. 24
3	-	-	-	
4	1457	3 FLAKES	GRAY FLINT	FIG. 40
5	-	-	-	
7	-	-	-	
8	1365	POUNDER	ANDESITE	FIG. 40
8	1357	SPINDLE WHORLS	LIMESTONE	FIG. 40
8	1359	SPINDLE WHORLS	LIMESTONE	FIG. 40
16	-	-	-	
17	1441	QUERN	STONE	FIG. 9
17	1443	POUNDER	STONE	FIG. 9
17	1444	QURN	STONE	FIG. 9
19	1288	POUNDER	ANDESITE	FIG. 12
19	1291	POUNDER	ANDESITE	FIG. 12
20	1285	AWL	BONE	FIG. 12
20	1286	POUNDER	DIABASE	FIG. 12
22	1499	AWL	BONE	FIG. 15
22	1498	AXE	DIABASE	FIG. 15
22	1500	POUNDER	CHALCEDONY	FIG. 15
22	1501	POUNDER	ANDESITE	FIG. 15
22	1504	2 FLAKES/BLADES?		-
24	-	-	-	
25	-	-	-	
27	1321	POUNDER		-
27	1322	POUNDER		FIG. 24
28	-	-	-	
30	-	-	-	
35	1403	POUNDER	DIABASE	FIG.30
36	-	-	-	
40	-	-	-	
41	-	-	-	
44	-	-	-	
47	-	-	-	
50	1431	5 FLAKES	FLINT	FIG. 46
50	1430	NEEDLE	BONE	FIG. 46
51	-	-	-	
54	1405	AWL	BONE	FIG. 46
69	909	FLAKE	FLINT	FIG. 61
69	1456	POUNDER	ANDESITE	FIG. 61
70	988	POUNDER	DIABASE	FIG. 64
70	991	MORTAR	DIABASE	FIG. 64
74	-	-	-	
75	-	-	-	
80	-	-	-	
82	-	-	-	
83	995	SMALL MORTAR	STONE	FIG. 78
85	1083	QUERN	DIABASE	FIG. 79
96	-	-	-	
101	1446	POUNDER	ANDESITE	FIG. 33
102	1436	POUNDER	ANDESITE	FIG. 33
102	1437	POUNDER	DIABASE	FIG. 33
105	-	-	-	
Sotira (Dikaios)				
1	-	-	-	-

UNIT	SFNUM	TYPE	MATERIAL	CROSS-REF.
2	-	-	-	-
4	-	-	-	-
5	790	PESTLE/HAMMER	ANDESITE	
5	791	GRINDER	ANDESITE	
6	785	PESTLE/HAMMER	LIMESTONE	
8	786	PESTLE	ANDESITE	
8	787	GRINDER	ANDESITE	
9	-	-	-	-
10	239a-b	KNIFE BLADES	FLINT	PL.116
10	239c	BROAD BLADE	FLINT	
10	239d	NOTCHED BLADE	FLINT	PL.116
10	239e-f	POINTED BLADES	FLINT	
10	239g	END-SCRAPER	FLINT	PL.116
10	240a,b	POINTED BLADES	FLINT	PL.116
10	241	CELT	ANDESITE	PL.94
10	784	MINIATURE CHISEL	ANDESITE	PL.96,106
14	-	-	-	-
15	222	NEEDLE	BONE	PL.104,105
15	246	FLAKE/BLADE	FLINT	
16	67	PESTLE	?	PL.97
16	68	POINTED BLADE	FLINT	
16	69	SICKLE BLADE	FLINT	
16	70	CELT	ANDESITE	PL.94
16	71	CELT	ANDESITE	PL.94
16	72	CELT	ANDESITE	PL.94
16	73	KNIFE BLADE	FLINT	PL.117
16	74	POINTED BLADE	FLINT	
16	76	POINTED BLADE	FLINT	
16	77	POINTED FLAKE	FLINT	
16	78	KNIFE BLADE	FLINT	
16	79	KNIFE BLADE	FLINT	
16	80	END-SCRAPER	FLINT	PL.117
16	81	SICKLE BLADE	FLINT	
16	84	CELT	ANDESITE	PL.93
16	85	CELT	ANDESITE	PL.94
16	87	KNIFE BLADE	FLINT	
16	89	CELT	?	PL.93
16	91	BLADE	FLINT	
16	92	BLADE	CHALCEDONY	
16	157	CELT	ANDESITE	PL.89,95
16	158	CELT	ANDESITE	PL.89,95
16	159	CELT	DIABASE	PL.89,95
16	160	QUERN	ANDESITE	PL.100
16	162	CORE	FLINT	PL.117
16	221a	KNIFE BLADE	FLINT	PL.117
16	221b	BLADE	FLINT	
16	221c	POINTED BLADE	FLINT	
16	356	7 BLADES	FLINT	
16	356	7 KNIFE BLADES	FLINT	
16	356e	END-SCRAPER	FLINT	
16	356	5 FLAKES	FLINT	
16	357	36 FLAKES	FLINT	
16	357kk	CORE	FLINT	
16	358a	FLAKE	FLINT	
16	358b-f	CORES	FLINT	
16	362	CELT	ANDESITE	PL.88,94
16	363	CELT	ANDESITE	PL.93
16	364	CELT	ANDESITE	PL.95
16	365	CELT	ANDESITE	PL.89,95
16	366	CELT	ANDESITE	PL.95
16	367	KNIFE BLADE	FLINT	
16	368	GRINDER	DIABASE	PL.99

UNIT	SFNUM	TYPE	MATERIAL	CROSS-REF.
16	369	GRINDER	DIABASE	PL.99
16	370	PESTLE	ANDESITE	PL.98
16	371	PESTLE	LIMESTONE	PL.98
16	372	HAMMER	LIMESTONE	PL.101
16	374	HAMMER	CHELCEDONY	PL.101
16	375	POLISHER	CHALCEDONY	PL.101
17	250	PESTLE	DIABASE	PL.89,97
17	251	PESTLE	ANDESITE	PL.89,98
17	252	CELT	ANDESITE	PL.93
17	253	PESTLE	ANDESITE	PL.97
17	254	PESTLE	ANDESITE	PL.97
17	256	FLAKE	FLINT	
17	258	CELT	ANDESITE	PL.94
18	98	GRINDER	ANDESITE	PL.99
18	101	QUERN	ANDESITE	PL.100
18	102	PESTLE	ANDESITE	PL.98
18	398	PESTLE	ANDESITE	PL.98
18	399	GRINDER	ANDESITE	PL.99
18	400	GRINDER	ANDESITE	PL.99
18	401	GRINDER	ANDESITE	PL.99
18	402	HAMMER	CHALCEDONY	PL.100
18	403	QUERN	DIABASE	
18	409a-d	BLADES	FLINT	
18	410	CELT	ANDESITE	PL.93
18	411	CELT	ANDESITE	PL.88,93
18	412	CELT	ANDESITE	PL.95
18	415a-e	FLAKES	FLINT	
18	416	CELT	ANDESITE	PL.95
19	235a	NEEDLE	?	PL.104,105
19	259	CHISEL	ANDESITE	PL.96
19	261	KNIFE BLADE	FLINT	PL.117
19	263	PICK	DEER'S ANTLER	
19	268	BLADE	FLINT	
19	269	PESTLE	ANDESITE	PL.97
19	270	BLADE	FLINT	PL.117
19	449	BLADE/FLAKE	FLINT	
19	452a-b	SCRAPERS	FLINT	PL.117
19	452c	RETOUCHED BLADE	FLINT	
19	452	6 FLAKES	FLINT	
19	452h,i	CORES	FLINT	
19	452d,k	BLADES	FLINT	
20	110	BLADE	FLINT	
20	111	MINIATURE CHISEL	ANDESITE	PL.96
20	112	CELT	ANDESITE	PL.94
20	115	BLADE	FLINT	
20	116	RETOUCHED BLADE	FLINT	
20	117	BLADE	FLINT	
20	122	CELT	ANDESITE	PL.106
20	123	HAMMER	LIMESTONE	PL.89,101
20	124	3 CORES	FLINT	
20	126	BLADE	FLINT	
20	229	CHISEL	STEATITE	PL.90,102
23	-	-	-	-
24	62	BLADE/FLAKE	FLINT	
24	673	GRINDER	ANDESITE	PL.99
26	150	CHISEL	ANDESITE	PL.96
26	463a-d	FLAKES	FLINT	
26	468a-f	FLAKES	FLINT	
26	469	HAMMER	CHERT	PL.101
28	273	PESTLE	ANDESITE	PL.89,97
28	274	CHISEL	ANDESITE	PL.96
28	275a	KNIFE BLADE	FLINT	PL.118

UNIT	SFNUM	TYPE	MATERIAL	CROSS-REF.
28	275b	BLADE	FLINT	PL.118
28	479	3 BLADES	FLINT	PL.118
28	479b	END-SCRAPER	FLINT	PL.118
28	479	6 FLAKES	FLINT	
28	479i	CORE	FLINT	
29	182	NEEDLE	BONE	PL.104,105
29	277	PESTLE	ANDESITE	PL.97
29	278	CELT	ANDESITE	PL.94
29	482a-e	FLAKES	FLINT	
30	232	CHISEL	ANDESITE	PL.96
30	279	CELT	ANDESITE	PL.95
30	280	CELT	ANDESITE	PL.93
30	281a-b	BLADES	FLINT	
30	282	BLADE	FLINT	
30	496	CELT	DIABASE	PL.89,95
31	535	SCRAPER	FLINT	
32	214	NEEDLE	BONE	PL.104,105
32	503	13 FLAKES	FLINT	
32	503b	CORE	FLINT	
33	132	KNIFE BLADE	FLINT	
33	133	PESTLE	LIMESTONE	PL.97
33	136	SMALL CELT	LIMESTONE	PL.94
33	137	END-SCRAPER	FLINT	PL.118
33	511A	CORE	FLINT	
33	511A	16 FLAKES	FLINT	
33	513	5 BLADES	FLINT	
35	200	CELT	?	PL.94
36	175	NEEDLE	BONE	PL.104,105
36	203	PICK?	DEER'S ANTLER	PL.106
36	204	CHISEL	ANDESITE	PL.96
36	205	CELT	ANDESITE	PL.94
36	206	CELT	ANDESITE	PL.93
36	209	PESTLE	ANDESITE	PL.97
36	210	QUERN	SANDSTONE	PL.100
37	-	-	-	-
39	723	3 FLAKES	FLINT	
40	565	FLAKE	FLINT	
42	297	PESTLE	ANDESITE	PL.98
43	298	PESTLE	ANDESITE	PL.98
44	196	CELT	ANDESITE	PL.93
44	197a	KNIFE BLADE	FLINT	
44	197	3 BLADES	FLINT	
44	197c	END-SCRAPER	FLINT	
45	-	-	-	-
46	-	-	-	-
47	219	NEEDLE	BONE	PL.104,105
48	-	-	-	-
49	627	2 FLAKES	FLINT	
49	628	PICK?	DEER'S ANTLER	
52	57	CELT	ANDESITE	PL.95
56	149	HAMMER	LIMESTONE	
56	471a	BLADE	FLINT	PL.117
56	471b-d	FLAKES	FLINT	
62	47	PESTLE	ANDESITE	PL.97
62	49	END-SCRAPER	FLINT	PL.118
62	53	POLISHER?	CHALCEDONY	PL.89,101
62	54	PESTLE	ANDESITE	PL.89,98
62	55	CELT	ANDESITE	PL.94
66	156	AWL	FLINT	PL.118
66	188	MINIATURE PESTLE	ANDESITE	PL.98
66	592	FLAKE	FLINT	
67	610	2 FLAKES	FLINT	

UNIT	SFNUM	TYPE	MATERIAL	CROSS-REF.
67	610	BLADE	FLINT	
Vrysi (Peltenburg)				
1	333	NEEDLE	ANTLER	FIG.55
1	492	NEEDLE	ANTLER	
1	493	NEEDLE	ANTLER	
1	505	NEEDLE	BONE	FIG.55, PL. 27F
1	506	NEEDLE	BONE	
1	507a-h	NEEDLE	BONE	
1	511	NEEDLE	BONE	
1	513	NEEDLE	ANTLER?	
1	1005	NEEDLE	BONE	
2	374	NEEDLE	BONE	
2	387	NEEDLE	BONE	
2	388	NEEDLE	ANTLER?	
3	349	NEEDLE	BONE	
3	352	NEEDLE	BONE	
3	367	NEEDLE	BONE	FIG.55, PL.27F
3	469	NEEDLE	BONE	
3	1021a	BURNISHER	BONE	FIG.57
3	346	PESTLE	STONE	
3	362	PESTLE	STONE	FIG.68
3	342	GRINDER	STONE	
3	345	HAMMER/GRINDER	STONE	
3	341b	RUBBER	STONE	
3	343	RUBBER?	STONE	
3	344	RUBBER?	STONE	PLS. 29E, 92
3	348f-h	AXE	STONE	PLS.29E, 92
3	348j	AXE	STONE	PLS.29E, 92
3	348k	AXE	STONE	
3	380	AXE	STONE	
3	398	AXE	STONE	
3	399	AXE	STONE	
3	348e	ADZE	STONE	PLS.29E,92
3	348a-d	CHISEL	STONE	PLS.29E,92
3	348l	CHISEL	STONE	PLS. 29E, 92
3	348m	CHISEL	STONE	PLS.29E, 92
3	341a	TROUGH	STONE	
3	370	TROUGH	STONE	
3	347	SHARPENER	STONE	FIG.65, PL.93
4	711	NEEDLE	BONE	PL. 27B
4	712	NEEDLE	BONE	FIG.55, PL.27B,D
4	740	NEEDLE	BONE	PL.27B
4	741	NEEDLE	BONE	
4	765	NEEDLE	BONE	FIG.55, PL.27B,D
4	781	NEEDLE	BONE	
4	782	NEEDLE	BONE	
4	784	NEEDLE	BONE	
4	901	NEEDLE	BONE	PL.27B
4	902	NEEDLE	BONE	
4	920	NEEDLE	BONE	
4	945	NEEDLE	BONE	
4	922	BURNISHER	BONE	
4	935	PESTLE	STONE	
4	710	AXE/HAMMER	STONE	
4	790	CHISEL	STONE	
4	910	HOOK	BONE	FIG.58
4	941	HOOK	BONE	FIG.58
4	992	HOOK	BONE	FIG.58
5	189a	NEEDLE	BONE	
5	222	NEEDLE	BONE	
5	243	NEEDLE	BONE	

UNIT	SFNUM	TYPE	MATERIAL	CROSS-REF.
5	244	NEEDLE	BONE	
5	324	NEDDLE	BONE	PL.28A
5	350	NEEDLE?	BONE	
5	220	PESTLE	STONE	
5	240	PESTLE	STONE	
5	327	QUERN	STONE	
5	221	RUBBER	STONE	
5	326	CHISEL	MARBLE	
5?14	275	CORE	CHERT	FIG.69
5	280	BLADE	FLINT	
7	808	NEEDLE	BONE	
7	810	NEEDLE	BONE	PL.27F
7	844	NEEDLE	BONE	
7	884	NEEDLE	BONE	PL.27F
7	955	PESTLE	STONE	
7	968	PESTLE	STONE	
7	964	HAMMER	STONE	
7	957	RUBBER	STONE	
7	959	RUBBER	STONE	
7	960	RUBBER	STONE	
7	961	RUBBER	STONE	
7	963	RUBBER	STONE	
7	965	RUBBER	STONE	
7	966	RUBBER	STONE	
7	967	RUBBER	STONE	
7	969	RUBBER	STONE	
7	970	RUBBER	STONE	
7	971	RUBBER	STONE	
7	811a-l	AXE	STONE	
7	811m	CHISEL	STONE	PL.29D,F
8	688	NEEDLE	BONE	
8	738	NEEDLE	BONE	PL.27F
8	739	NEEDLE	BONE	PL.27F
8	754	NEEDLE	BONE	
8	799	NEEDLE	BONE	
8	800	NEEDLE	BONE	
8	692	AXE	STONE	
8	935	ADZE/PESTLE?	STONE	
10	726	NEEDLE	NEEDLE	PL.27C
10	714	PESTLE	STONE	
10	772	PESTLE	STONE	
10	774	PESTLE	STONE	
10	775	PESTLE	STONE	
10	705	HAMMER	STONE	
10	716	HAMMER	PEBBLE	
10	720	HAMMER/RUBBER?	STONE	
10	701	QUERN?	STONE	
10	702	QUERN	STONE	
10	713	QUERN	STONE	
10	703	RUBBER	STONE	
10	704	RUBBER	STONE	
10	715	RUBBER	STONE	
10	814	RUBBER	STONE	
10	815	RUBBER	STONE	
10	817	RUBBER	STONE	
10	722	AXE	STONE	
10	723	AXE	STONE	
12	471	NEEDLE	BONE	
12	510	PESTLE	STONE	
13	-	-	-	
14	284	NEEDLE	BONE	
14	291	NEEDLE	BONE	

UNIT	SFNUM	TYPE	MATERIAL	CROSS-REF.
14	194	PESTLE	STONE	
14	195	RUBBER/ADZE	STONE	
14	277	FLAKE	FLINT	
15	-	-	-	
16	405	NEEDLE	BONE	FIG.55,PL.27F
16	478	NEEDLE	BONE	
16	406	PESTLE	STONE	
16	431	RUBBER	STONE	
18	248	NEEDLE	BONE	
18	236	QUERN	STONE	
18	198	RUBBER	STONE	
18	237	RUBBER	STONE	
18	260	AXE	CHIPPED BLADE	
18	308	BLADE	FLINT	
18	199	TROUGH	STONE	
19	57	PESTLE	STONE	FIG.63
19	187	RUBBER	STONE	
19	60	CHISEL	STONE	FIG.66,PL.91
19	59	FLAKE	OBSIDIAN	
19	58	BLADE	FLINT	
19	273	BLADE	FLINT	FIG.69
19	274	BLADE	FLINT	
21	287	NEEDLE	ANTLER	
21	289a	NEEDLE	BONE	
21	289b	NEEDLE	BONE	
21	289c	NEEDLE	BONE	
21	83	PESTLE	STONE	FIG.63
21	224	GRINDER/HAMMER	STONE	
21	225	GRINDER	STONE	
21	227	GRINDER	STONE	
21	255	GRINDER	STONE	
21	256	GRINDER	STONE	
21	268	GRINDER	STONE	
21	302	GRINDER	STONE	
21	27	HAMMER	STONE	
21	88	QUERN	STONE	
21	305	QUERN?	STONE	
21	84	RUBBER	STONE	FIG.64
21	85	RUBBER	STONE	FIG.65
21	86	RUBBER	STONE	FIG.64
21	226	RUBBER	STONE	
21	228	RUBBER	STONE	
21	230	RUBBER	STONE	
21	303	RUBBER	STONE	
21	26	BLADE	FLINT	
22	239	QUERN	STONE	
22	233	RUBBER	STONE	
26	304	QUERN?	STONE	
29	-	-	-	
30	158	AXE	STONE	

table 5: Miscellaneous

Note: small find number and cross-references refer to the publication of each particular site.

UNIT	SFNUM	TYPE	MATERIAL	CROSS-REF.
Khirokitia (Dikaios)				
1	1488	PIN	BONE	FIG. 24
2	-	-	-	
3	1482	BEAD	BLACK LAVA	FIG. 24
3	1483	DENTALIUM	SHELL	FIG. 24
4	-	-	-	
5	-	-	-	-
7	-	-	-	-
8	1358	HORN-SHAPED OBJE(	LIMESTONE	FIG. 40
16	-	-	-	
17	1442	ENGRAVED PATTERN	PEBBLE	FIG. 9
19	-	-	-	
20	-	-	-	-
22	1477	HANDLE	PART OF ANTLER?	-
24	1350	BEAD	PICROLITE	FIG.24
25	-	-	-	
27	-	-	-	
28	-	-	-	
30	-	-	-	
35	-	-	-	
36	1401	FIDDLE-SHAPED IDOL	STONE	FIG. 30
40	-	-	-	
41	-	-	-	
44	-	-	-	
47	-	-	-	
50	-	-	-	
51	1428	PIN	BONE	-
54	-	-	-	
69	-	-	-	-
70	-	-	-	-
71	-	-	-	
74	-	-	-	
75	-	-	-	
80	-	-	-	
82	-	-	-	
83	-	-	-	
85	-	-	-	
96	1005	CONICAL	STONE	FIG. 28
96	1004	ENGRAVED	PEBBLE	FIG.28
101	-	-	-	
102	-	-	-	-
105	-	-	-	
Sotira (Dikaios)				
1	-	-	-	-
2	-	-	-	-
4	-	-	-	-
5	-	-	-	-
6	-	-	-	-
8	-	-	-	-
9	-	-	-	-
10	243	HANDLE?	DEER'S ANTLER	PL.106
14	-	-	-	-
15	223	2 LUMPS	RED PIGMENT	
16	75	PERFORATED DISK	LIMESTONE	PL.91,103
16	86	PENDANT	PICROLITE	PL.90,102
16	88	ORNAMENT?	?	PL.90,102

UNIT	SFNUM	TYPE	MATERIAL	CROSS-REF.
17	255	PEBBLES	RED JASPER	
18	106	IDOL	LIMESTONE	PL.91,102
18	417	PENDANT	PICROLITE	PL.90,102
19	231	PIN	BONE	PL.105
19	266	PENDANT	PICROLITE	PL.90,102
19	267	PERFORATED DISC	PEBBLE?	PL.91,103
20	118	HANDLE?	BONE	PL.104,105
20	121	AMULET	PICROLITE	PL.90,102
20	125	PEBBLES	RED JASPER	
23	-	-	-	-
24	-	-	-	-
26	-	-	-	-
28	-	-	-	-
29	218	HANDLE	BONE	PL.104,105
30	-	-	-	-
31	-	-	-	-
32	-	-	-	-
33	-	-	-	-
35	-	-	-	-
36	178	PIN	BONE	PL.104,105
37	-	-	-	-
39	-	-	-	-
40	-	-	-	-
42	-	-	-	-
43	-	-	-	-
44	-	-	-	-
45	-	-	-	-
46	-	-	-	-
47	-	-	-	-
48	-	-	-	-
49	-	-	-	-
52	-	-	-	-
56	-	-	-	-
62	-	-	-	-
66	-	-	-	-
67	-	-	-	-
Vrysi (Peltenburg)				
1	1000	SLEEVE	ANTLER	FIG.57
1	331	LAMP	CALCARNITE	
2	-	-	-	-
3	334	MAT	SILICATES	PL.27A
3	389a	FIGURINE	STONE+SILICATE?	FIG.61, PLS.32D,F,86
3	389b	FIGURINE	STONE+SILICATE?	PL.86
3	361	LAMP	STONE	
3	306	PICK	BONE	
3	307	PICK	ANTLER	
4	785	TOGGLE	BONE	
4	921	TOGGLE?	BONE	
4	938	BEAD	BONE	PL.28C
4	942	BEAD	BONE	
4	1015a-p	SLEEVE	ANTLER	FIG.57
4	839	PLUG?	CLAY	PL.29C
4	728	DISC	POTTERY	
4	729	DISC	POTTERY	
4	783	DISC	POTTERY	
4	931	DISC	POTTERY	
4	954	DISC	POTTERY	
4	791	LAMP	STONE	PL.31C
4	792	LAMP	STONE	
4	900	LAMP	STONE	
5	242	BEAD	ANTLER	PL.28B

UNIT	SFNUM	TYPE	MATERIAL	CROSS-REF.
5	325	DISC	POTTERY	
5	223	LAMP	STONE	
7	972	MAT	SILICA LINES	PL.76
7	850	PLUG	CLAY	
7	809	DISC	POTTERY	
7	983	DISC	RM POTTERY	FIG.82.3
8	689	BEAD	BONE	PL.28B
8	707	BEAD	BONE	PL.28B
8	937	LAMP	STONE	
10	727	DISC	POTTERY	
12	-	-	-	
13	-	-	-	
14	252	BEAD	ANTLER	
14	253a-h	BEADS	BONE	FIG.56, PL.28B
14	285	BEAD	BONE	
14	286a	PLUG	CLAY	
14	286b	PLUG	CLAY	FIG.58
14	372	PLUG	CLAY	FIG.58
14	360	LAMP	STONE	
16	414	BEAD	BONE	FIG.56, PL.81
16	407	DISC	POTTERY	PL.28F
16	449	LAMP	STONE	
18	246	BEAD	BONE	FIG.56, PL.81
18	261	BEAD	BONE	FIG.56, PL.28B
19	262a	BEAD	BONE	
19	262b	BEAD	BONE	
21	69b	MAT	SILICATE	
21	288	PIERCED DISC	?	PL.28F
22	295	MACEHEAD	ADAMELLITE	FIG.62, PL.32B,C
26	321	DISC	POTTERY	
26	552	DISC	POTTERY	
26	558	DISC	POTTERY	
29	204	PLUG	CLAY	
30	-	-	-	-

table 6: Vessels

Unit	Industry	Type	Number
Khirokitia (Dikaios)			
1			
2			
3			
4			
5			
7			
8			
16			
17			
19	STONE	MIN.BOWL	1
20			
22			
24			
25			
27			
28			
30			
35			
36			
40			
41			
44			
47			
50			
51			
54			
69			
70	STONE	BOWL	3
71			
74			
75			
80			
82			
83			
85			
96			
101			
102			
105			
Sotira (Dikaios)			
1	-	-	-
2	-	-	-
4	-	-	-
5	-	-	-
6	-	-	-
8	-	-	-
9	-	-	-
10	STONE	BOWL	1
14	STONE	BOWL	1
15	STONE	BOWLS	2
16	-	-	-
17	-	-	-
18	STONE	BOWL	1
19	-	-	-
20	-	-	-

23	-	-	-
24	-	-	-
26	-	-	-
28	-	-	-
29	-	-	-
30	-	-	-
31	-	-	-
32	POTTERY	JUGS	2
32	POTTERY	BOWL	1
33	POTTERY	JUG	1
33	POTTERY	BOWL	1
35	-	-	-
36	-	-	-
37	-	-	-
39	-	-	-
40	-	-	-
42	-	-	-
43	-	-	-
44	POTTERY	JUG	1
45	-	-	-
46	-	-	-
47	-	-	-
48	-	-	-
49	-	-	-
52	-	-	-
56	-	-	-
62	-	-	-
66	-	-	-
67	-	-	-

Vrysi (Peltenburg)

1	POTTERY	BOWL	3?
1	POTTERY	JUG	1
1	POTTERY	JAR	1
1	STONE	BOWL	1
2	STONE	BOWL	1
3	POTTERY	BOWL	1
3	POTTERY	JUG	1
4	POTTERY	BOWL	2
4	POTTERY	JUG	1
5	-	-	-
7	POTTERY	TRAY-CW	1?
8	-	-	-
10	POTTERY	TRAY-CW	1?
10	STONE	BOWL	1
10	SHELL	BOWL?	1
12	-	-	-
13	-	-	-
14	STONE	BOWL	1
15	POTTERY	BOWLS	2
16	POTTERY	TRAY-CW	1
18	-	-	-
19	POTTERY	JUG	1
21	-	-	-
22	-	-	-
26	-	-	-
29	POTTERY	JUG	2
30	-	-	-

table 7: Unspecified/broken objects.

Note: small find numbers and cross-references refer to the publication of each site.

Unit	Sfnum	Type	Material	Cross-ref.
Khirokitia (Dikaios)				
1	1487	SHERDS-LAMPS	CLAY	FIG. 24
1	1490	SHERDS	POTTERY	FIG. 24
2	1489	FRAG. OF STONE BOWL	DIABASE	FIG. 24
3	-	-	-	-
4	-	-	-	-
5	1455	IMPLEMENT?	FLINT	FIG.40
7	1397	FRAG. OF STONE BOWL	STONE?	FIG. 40
8	-	-	-	-
16	-	-	-	-
17	-	-	-	-
19	1290	MORTAR BOWL FRAG.	LIMESTONE	FIG. 12
20	1287	BOWL FRAGMENT	DIABASE	-
22				
24				
25				
27				
28				
30				
35				
36	1402	FRAG. OF BOWL	STONE	FIG. 30
40				
41				
44				
47				
50				
51				
54				
69	866	FRAG. OF STONE BOWL	ANDESITE	FIG. 46
70	989	FRAG. OF BOWL	DIABASE	FIG. 64
71	1438	PART OF AXE-HEAD		FIG. 64
74				
75				
80				
82				
83				
85				
96				
101				
102	1434	UNFINISHED BOWL	ANDESITE	FIG. 33
102	1435	UNFINISHED AXE	DIABASE	FIG. 33
105				
Sotira (Dikaios)				
1	-	-	-	-
2	674	POINTED TOOL	BONE	PL. 105
4	-	-	-	-
5	-	-	-	-
6	-	-	-	-
8	-	-	-	-
9	-	-	-	-
10	306	?	DEER'S ANTLER	
14	108	?	DEER'S ANTLER	
15	245	?	DEER'S ANTLER	
16	83	PERFORATED STONE	LIMESTONE	PL. 91, 103
16	88	ORNAMENT?	?	PL. 90, 102

16	90	UNFINISHED PENDANT?	PICROLITE	PL. 90, 102
16	373	PEBBLE-TRACES OF USE	ANDESITE	PL. 99
17	257	UNFINISHED ORNAMENT	PICROLITE	PL. 90, 102
18	413	UNFINISHED CELT	ANDESITE	PL. 94
19	235b	POINTED TOOL	BONE	PL. 105
19	264	POINTED TOOL	BONE	PL. 105
19	265a-b	TOOLS?	BONE	PL. 104, 105
19	260	UNFINISHED ORNAMENT?	?	PL. 90, 102
19	262	?	DEER'S ANTLER	PL. 106
20	-	-	-	-
23				
24				
26				
28				
29	151	TOOL?	BONE	
30	283	?	GOAT'S HORNS	
31				
32				
33				
35				
36	202	UNFINISHED CELT	ANDESITE	
36	207	PART OF CELT	ANDESITE	PL. 93
36	208	PART OF CELT	ANDESITE	PL. 93
37				
39	724	UNFINISHED CELT	ANDESITE	PL. 96
39	725a-b	WORKED PEBBLES	LIMESTONE	PL. 91, 103
40				
42				
43				
44				
45	299	?	DEER'S ANTLER	PL. 106
46				
47				
48				
49				
52	25	FRAG. CELT	ANDESITE	PL. 89, 95
56				
62	48	PART OF PESTLE	DOLERITE	PL. 97
66				
67	198	TOOL?	DEER'S ANTLER	PL. 106

Vrysi (Peltenburg)

1	501	?	WORKED BONE	
2	390	SOCKETED STONE/SHARPE	STONE	
2	422	?	WORKED	STONE
3	1021b	?	WORKED BONE	
3	1021c	?	WORKED BONE	
3	340	?	SOCKETED STONE	
4	899	QUERN/SOCKETED STONE	STONE	
4	943	?	WORKED BONE	FIG. 56
4	944	?	WORKED BONE	FIG. 56
5	190	RING-CUT BONE/BEAD?	BONE	FIG. 56
7	858	RING-CUT BONE	BONE	
7	907	RING-CUT BONE	BONE	FIG. 56
7	908	?	WORKED BONE	
7	871	?	WORKED BONE	
7	958	WORKED STONE	CALCARENITE	
7	962	WORKED STONE/RUBBER?	STONE	
8	690	?	WORKED BONE	
8	691	?	WORKED BONE	
8	736	?	WORKED BONE	
8	758	LAMP/SOCKETED STONE?	STONE	
10	721	SOCKETED STONE/RUBBER	STONE	PL. 31A

10	719	FLAKED TOOL	STONE	
10	773	FLAKED TOOL	STONE	
10	724	?	WORKED BONE	PL. 27C
10	717	?	UTILISED STONE	
10	718	?	UTILISED STONE	
12	-	-	-	-
13	-	-	-	-
14	-	-	-	-
15	266	?	SOCKETED SLAB	
15	267	?	PLAIN SLAB	PL. 31D
16	413	?	PIERCED STONE	
18	200	?	SOCKETED STONE	
19	328	?	SOCKETED STONE	
21	87	?	SOCKETED STONE	
21	229	?	STONE/SLAB	
21	231	?	STONE/SLAB	PL. 31E
21	232	?	STONE/SLAB	PL. 31E
21	257	?	STONE/SLAB	PL. 31E
21	258	?	STONE/SLAB	PL. 31E
21	287	?	WORKED ANTLER	
22	-	-	-	-
26	400	?	WORKED STONE	
29	-	-	-	-
30	133	?	SOCKETED STONE	PL. 30F
30	134	?	SOCKETED STONE	PL. 30F
30	135	?	SOCKETED STONE	PL. 30F
30	218	?	SOCKETED STONE	PL.30F

-

table 8: size and segmentation types.

Note: types of segmentation: A: no partition, A': no partition but adjacent to another unit, Ba: partition wall, Bb: low partition (ridge), Bc: partition wall froming an enclosed area, Ca: pillar/ butress. [see also app. I]

UNIT	FLOOR SPACE	TYPES
Khirokitia (Le Brun) - east sector		
1'	8.30?	Ca
2'	8.30?	Ca
3'	8.30?	Ca
4'	12.25	Ca
5	16.66	Ca/Bb
6	16.95	Ca/Bb
7	2.40	A
8'	2.40	A
9'	12.10	Ca
10	12.10	Ca/Ba
11'	4.15	Ba
12'	4.15	Ba
13'	4.15	A
14'	4.15	A
15'	?	Ca
16'	2.40	Ba
17'	2.00?	A
18'	2.00?	A
19'	5.95?	A
20'	7.55?	A
21'	7.55?	A
22'	7.55?	A
23'	12.00	Ba
24'	12.00	A
25'	4.30?	A
26	7.15	A
27	7.15	Ba/Bb
28	3.38	Ba
29	3.88	Bb
30	3.88	A
31	3.46	A
32'	4.50?	A
33'	4.50?	A
34'	3.80	A
35	2.83	Ca
36'	5.72?	A
37'	4.90?	A
38'	4.90?	A
39'	4.90?	A
40'	2.30?	A
41	4.24	A
42'	9.00?	A
43'	9.00?	A
44'	5.95	Ca?
45'	4.30?	A
46'	3.14?	A
47'	3.80?	A
Khirokitia (Le Brun) -west sector		
1	2.38	Ba
2'	3.65	Bb
3'	3.65	A
4'	3.45	Ba
5	5.70	Ba
6	5.70	Ba

UNIT	FLOOR SPACE	TYPES
7	4.50	Ba
8'	4.90	A
9	3.80	Ba
10	3.80	Ba
11	3.80	A
12'	8.55	Bc
13'	2.00?	A
14	2.00	A
15'	2.00	A
16	?	Ba
17'	2.00?	A
18'	2.00?	A
19	7.00?	Ca/Ba?
20'	7.00	Ca
21'	7.00	Ba
22	3.80	Ba
23	3,15	Ba
24	4.50	Bc
25	4.50	Bc
26	3.45	A
27'	5.30?	A
28	8.00	Bc
29'	8.00	Bc
30	6.60	A
31'	3.15	Ba
32	3,15	A
33'	8.55	Ba
34'	8.00	Bc
35	3.30	Ba
36	3.30	Ba
37	3.35	A
38	4.95	Bc
39	2.15	A
40'	1.90	Bc
41'	3.45	A
42	6.15	Ba
43	6.15	Ba
44'	4.15	A
45'	4.00	A
46	5.30	Ba
47	15.20	A
48'	10.20	A
49'	10.20	Ba
50'	8.55	A
51'	17.20?	A
Khirokitia (Dikaios) both sectors .		
1	>4.60	A
2	>4.60	A
3	>4.60	A
4	>5.70	A
5	>5.70	A
6'	>5.70	A
7	5.70	A
8	5.70	A
9'	11.20	Ba/Bb
10'	11.20	A
11'	>2.50	A?
12'	26.60	Ca
13'	26.60	Ca
14'	30.40	Ca
15'	30.40	Ca
16	30.40	Ca
17'	4.00	A?
18'	2.00	A?
19'	8.00	A?

SITE	PHASE	BUILDING	FLOOR/LAYER	DESCRIPTION	UNIT	DQCFII	END OF OCCUPATION	NATURE OF DEPOSITION	COMMENTS
CY.ST	LNL.3	B25	FL.II	A	43	D	C	C	
CY.ST	LNL.3	B26	FL. ?	? C		D	F		
CY.ST	LNL.3	B27	FL.II	(B40) A	44	D	B?/F	A/B?	
CY.ST	LNL.3?	B27	FL.I	C		D	D/C		NO PLAN
CY.ST	LNL.3?	B28	FL.I	(B40) C		D	D/C		
CY.ST	LNL.3	B30	FL.II	[A	45	A	C	C	
CY.ST	LNL.3	B31	FL.II	[A	46	A	C	C	
CY.ST	LNL.3?	B31	FL.I	C		C	D?/E		NO PLAN
CY.ST	LNL.3	B31A	FL.II	(B36) A	47	A	F/C?	C	NO SECTION
CY.ST	LNL.3	B31A	FL.I	A	48	A	F/E	C	NO SECTION
CY.ST	LNL.3	B32	FL.II	[A	49	C	B?/C	C	
CY.ST	LNL.3?	B32	FL.I	C		C	E		
CY.ST	LNL.3?	(B33)	FL.III	? *		D	C?		
CY.ST	LNL.3	B33	FL.II	B	50'	A	C	C	
CY.ST	LNL.3?	B33	FL.I	C		C	E		
CY.ST	LNL.3?	(B34A)	FL.III	[*		D	F		
CY.ST	LNL.3	B34A	FL.II	C		C	F		
CY.ST	LNL.3	B34A	FL.I	C		C	F/E		
CY.ST	LNL.4	B1	FL.I	B	51'	A	B/D/E		
CY.ST	LNL.4	B6	FL.I	A	52	A	F/E	C	
CY.ST	LNL.4	B3	FL.I	B	53'	C	E		
CY.ST	LNL.4	B5	FL.I	B	54'	A	D/E		
CY.ST	LNL.4	B7	FL.I	C		A	D?/E		
CY.ST	LNL.4	B2	FL.I	B	55'	A	E		
CY.ST	LNL.4	B8	FL.I	A	56	C	D?/E	C	
CY.ST	LNL.4	B10	FL.I	B	57'	C	E		
CY.ST	LNL.4	B11	FL.I	B	58'	A	D?/E		
CY.ST	LNL.4	B12	FL.I	B	59'	A	D?/E		
CY.ST	LNL.4	B16	FL.I	B	60'	A	D?/E		
CY.ST	LNL.4	B13	FL.I	B	61'	C	F/E		
CY.ST	LNL.4	B14	FL.I	A	62	A	D?/E	A/B	
CY.ST	LNL.4	B17	FL.I	B	63'	C	F/E		
CY.ST	LNL.4	B18	FL.I	C		C	E		
CY.ST	LNL.4	B20	FL.I	B	64'	D	F/E		
CY.ST	LNL.4	B21	FL.I	B	65'	C	F/E		
CY.ST	LNL.4	B22	FL.I	C		C	E		
CY.ST	LNL.4	B24	FL.I	C		A	E		NO PLAN

UNIT	FLOOR SPACE	TYPES
86'	7.00	A?
87'	6.30	A
88'	17.10	Ca?
89'	17.10	Ca?
90'	17.10	A?
91'	8.60	A
92'	8.60	Ca/Ba
93'	8.60	A?
94'	8.60	Bc
95'	8.60	Ca
96	8.60	Ca
97'	8.60	A?
98'	8.60	A?
99'	7,4	A
100'	5,1	A?
101	7.80	A
102	7.80	A
103'	7.80	Ca
104'	14.60	Ba?
105	6.00	A
106'	10.00	A
107'	10.00	A
108'	7.10	A'?/Ba
109'	7.10	A'?
110'	7.10	A'?
111'	3.70	A'?
112'	3.00	A'?

Sotira (Dikaios)		
1	8.60	Bc/A'?
2	8.60	Bc/A'?
3'	12.00?	A'?
4	>4.60	A'
5	>8.20	Bc/A'
6	>8.20	A'
7'	>5.90	A'
8	>5.90	A'
9	>8.20	Bc/A'
10	27.60	A'
11'	27.60	A'
12'	>8.00	A'
13'	7.50?	A'
14	11.30	A'
15	17.10	A
16	17.10	A
17	20.70	Bc
18	20.70	Bc
19	20.30	A
20	20.30	A
21'	24.00?	A?
22'	24.00?	A?
23	7.50	A'
24	9.10	Bc
25'	19.20?	A'
26	16.90?	Bc/A'
27'	9.90	A'
28	27.30?	A'?
29	15.30	Bc/A'?
30	18.00	Bc/A'
31	12.30	A'
32	29.30?	Bc
33	14.30?	A'
34'	4.90	A'
35	7.50	A'
36	19.80?	Bc
37	21.50?	A'?

UNIT	FLOOR SPACE	TYPES
38'	21.50?	A'?
39	16.50?	A'?
40	9.70	A
41'	21.50?	A'
42	7.10	A
43	>12.10	A'?
44	>5.20	A'?
45	5.80	A'
46	7.40	Ba/A'
47	10.70	A'
48	10.70	A'
49	13.70?	A'
50'	5.80	A'
51'	27.60	A
52	11.30	A'
53'	17.11	A
54'	20.70	A
55'	9.10	Bc
56	16.90?	A'
57'	27.30?	A'
58'	15.30	A'
59'	18.00	Bc/A'
60'	12.30	A'
61'	29.30?	A
62	14.30	A'
63'	7.50	A'
64'	16.50?	A'
65'	9.70	A
66	>12.10	A'
67	5.80	A'

Ayios Epiktitos - Vrysi (Peltenburg)		
1	>10.70	A
2	>10.70	A
3	>10.70	A
4	16.00?	A
5	12.60	A
6'	12.60	Ba
7	18.00	A
8	18.00	A
9'	>13.00	A
10	>13.00	A
11'	>10.50	Ba
12	>13.00	Ba/A'
13	13	Ba/A'
14	15.60	Bc/A'
15	15.60	A'
16	7.20	Bc/A'
17'	7.20	A'
18	7.20	A'
19	7.20?	A'
20'	7.50	A
21	7,5	A
22	7,5	A
23'	7,5	A
24'	7.50?	A
25'	22.00	A'
26	9.00	A'
27'	9.00?	A'
28'	7.20?	A'
29	27.00	A'
30	25.00	A'

Table 9: Distribution of posts and pits.

UNIT	PIT NO.	CONTENTS	POSTS
Khirokitia (Le Brun) - east sector			
5			
6			
7			
10	2		12
26			1
27			
28			
29			
30			
31			
35			
41			
Khirokitia (Le Brun) - west sector			
1			
5			
6			
7			
9			
10			
11			
14			
16			
19			
22			
23			
24			
25			
26			
28			
30			
32			
35			
36			7
37			
38			
39			
42			
43			
46			
47			
Khirokitia (Dikaios) both sectors			
1			
2			
3			
4			

UNIT	PIT NO.	CONTENTS	POSTS
5	1	in situ: animal's bone and a flint	
7			
8	1	lined/ashes, burned clay, pebbles	
8	1	pebbles,2 spindle whorls,horn-shaped object	
8	1	lined/ filled with pebbles	
16			
17			
19	1	darkish earth, animal bones	
20			
22	1	fine earth , ashes	
22	1	boulders of small size	
24			
25			
27	1	darkish earth, bones, flints and pebbles	
28			
30			
35			
36			
40	1	lined/bones, flints, pebbles,charcoal	
41			
44			
47	6	pebbles	
47	1	pebbles,ashes, charcoal	
50	1	lined/pebbles,ashes,flints	
50	1	lined/bone needle animal bones	
51			
54	1	pebbles,ashes	
69			
70	1	lined/animal bones, pebbles	
71			
74	2	earth filling	
75			
80	1	lined/ ?	
82			
83			
85			
96			
101			6
102	1	lined/ ?	9?
105			
Sotira (Dikaios)			
1			1
2			?
4	1	? stones at the rim	4?
5	1	1pestle,1grinder(lined with pebbles)	3
6	1	? lined with pebbles and mud	3
8	1	sherds,pestle,grinder,carbon.meterial	1
9			1
10	6	one with flakes in situ	10?

UNIT	PIT NO.	CONTENTS	POSTS
14			
15	1	quern,miniature stone bowl, stones	5
16			1?
17			4
18	1	?	3?
19	1	stones	8
20			3?
23	1	?	1
24			5
26			5
28	1	?	11
29	1	few sherds	2
30	2	one with a stone trough or tray	10
31			10
32	3	one with a jug in situ	7
33	2	one with 3 vessels in situ	1
35	1?		2
36	1	sherds, unfinished celt	2
37			13
39			6
40	3	one filled with ashes from the hearth	1
42			4
43			
44	1	?	?
45	1	CW jug	2
46			2
47			
48			6
49			4
52			11
56			6
62			6
66			2
67			2
Ayios Epiktitos - Vrysi (Peltenburg)			
1			
2			
3			1
4	1	clay-lined with in situ bowl	3
5	2	greenish clay,fuller's earth	3
7			1
8	1?	?	1
10			
12			17?
13			11?
14	1	soil,stones and bone / gravel / silicates	10
15			15
16			2
18	1?	ash?	4
19			

UNIT	PIT NO.	CONTENTS	POSTS
21			5
22			3
26			
29	2	?	1
30	2	one filled with stones	